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Techinal Software

☐ ^+ V0298 NORTHC V1.3 (AB)
The latest update on the public domain 'C' environment for the Amiga that I am aware of.

☐ ^+ V0523 DICE C COMPILER (AB)
Contains Matthew Dillons full featured, powerful C compiler and environment system.

☐ ^+ V0786 PASCAL
Contains everything needed to program in Pascal. Includes A68k 68000 assembler. Blink, Linking software and PCQ, a modest Pascal sub set compiler

☐ ^+ V1041 DIGITAL BREAD BOARD
is a full GUI digital logic circuit simulator. Digital Breadboard currently supports 2 and 3 input etc

☐ ^+ V1056 DEVELOPER
Contains the official Commodore developers kits for the Amiga Guide and Commodore Install utilities.

☐ ^+ V1060 CIRCUIT BOARD DESIGN
Several terrific routines for the electronic enthusiast. Includes PCBtool, a circuit board design tool.

☐ ^+ V1209 GNU C++ COMPILER (3) [HD]
Theses disks consists of the latest version of the GCC environment, Thus the compiler, driver, assembler, linker, header files inline code generation of library calls.

☐ ^+ V1213 PROGRAM LANGUAGES
ACE v1.02, is a PD Amiga BASIC compiler which, in conjunction with A68K & Blink produces stand alone executable's. run time shared libraries are required.

☐ ^* V1227 GAD TOOLS V2.2C
A standard Amiga shared runtime library which makes it a lot quicker / easier to build standard requesters into programs. Designed with CBM's guidelines in mind.

☐ ^+ V1384 HOW TO CODE IN C (AB)
Coves Debugging, Intuition and Graphic, Kodbiblotek, Tips & Tricks, Anropa AsmFranC, Dos intuition, WB start, DMake, GadToolsBox and Power Source.

☐ ^+ V1430 N.D.U.K V37 (ABCD)
Portions of the Commodore Native Developer Update Kit that can be licensed for distribution. Includes the fd files, libraries, startups, C include files, and tools

Popular Utilities

☐ ^+ V1362 CHECKERS TOOLBOX
Runs self test on all chips, all the ports and even the disk drive! All your hardware is tested and displayed in graphical info.

☐ ^+ V1405 VIRTUAL UTILITIES
5 utils containing everything needed for any Amiga to make virtual memory from their harddrive. The Amiga is fooled into thinking it has massive amounts of RAM when really it only has a small amount mapped to a file on the harddrive. Requires MMU

☐ ^+ V1719 TELETEXT V2.3
it is suitable for any PAL Amiga requirements link systems req) for more info, because it uses the parallel port to interface with the hardware. An electronic switch is provided to easily switch between the TeleText decoder and a printer.

☐ ^^ V1335 LIBRARIES & DATATYPES
This is a disk packed full of Amiga Workbench 3.0 Libraries and Datatypes. There's 47 Libraries from A to Z all libraries covered are right up to date and waiting to be installed. The disk also have installation notes to aid the beginners. also files in the L and Devs/DosDrivers drawers that can be copied or assigned.

☐ ^+ V1641 SUPER KILLERS V10.0
The latest collection of virus killers like AntiCicloVir v2.2a, Virus Checker v6.43, VirusZ II v1.07, and VT v2.67, Req the use of LHA which is in the c directory.

☐ ^* V1017 POST V1.86ENH (ABC)
PostScript interpreter which implements the full Adobe language. Supports Adobe type 1 and type 3 fonts, screen output, file output, and printer output.

☐ ^+ V1593 EPU DISK STAKKER V1.7
Double your hard drive capacity by installing EPU. After installing EPU to any Device (HardDisk, Floppy, Rad etc) every file which will be written to the device will be compressed & when any compressed file is read by any application it will be decompressed.

☐ ^* V1039 HD INSTALLER (AB)
Bought an A1200 machine and are having trouble with your hard drive why not install it correctly.

☐ ^* V1136 DISKSALVE 2
Repair your hard drive with this. recommended.

☐ ^+ V1326 C: COMMANDS & LIBS
The C: and LIBS disk contains over 100 commands ie within the C directory. Over 20 LIBRARY's are within the LIBS directory. Use them for your disks. They can be used to spice the disk up in appearance and in usage.

☐ ^+ V0490 MESSY SID II
once loaded will read MS Dos disks, Convert any text (asc) files on to an Amiga dos disk so that they can be loaded into any standard Word processor. The program will also convert the text back to your IBM disks.

☐ ^+ V1611 SNOOPDOS V3.0
Log's all the dos/library calls and more when you run a program. This is handy for both the programmer and the beginner. Have you ever installed a program to your harddrive and then discovered that it will not run without a certain library but you don't know which?

☐ ^+ V1928 VIRUS WORKSHOP V4.8
This is the one and only Virus Workshop by Markus Schmall. Now in the Version 4.8 . Test it!

☐ ^+ V0424 ANTIFLICKER
A program to stop the Flickering when you use the Amiga in Hi res move.

☐ ^+ V1669 TUDE V1.0
is a very extensive and easy way of degrading your machine for all sorts of purposes. It is useful for playing old game on A1200s for example which need kickstart 1.3. There is a GUI version included as well as a CLI version so most people will have no trouble using it. A highly useful tool for all Amiga owners. Good.

☐ ^+ V1523 RELOKICK V1.41
ANOTHER(!) version of ReloKick. Galahad of Dual Crew did ReloKick 1.4, so I decided to improve on that!

☐ ^+ V1356 NOERRORS V1.3
its main function is to hide physical disk errors from floppy disks and hard disks, so these disks can then be used without DOS showing read/write errors.

☐ ^+ V0662 DCOPY V3.1
Best PD copier on the Amiga. No new Features over 2 but has been updated with new code information.

☐ ^^ V1164 (AGA) ASA FIX DISK
An entire disk full of utilities for those A1200/A4000 owners out there who can not for the life of them get some of there favourite games or demos to work.

☐ ^* V1360 WB2.0 TUTORIAL
There is a lot more options open to you than just playing games. In the chapters Files Explained & Menus. attempt to explain the workings of WB2,as the manuals supplied with your Amiga.

☐ ^* V1242 RE ORG V3.11
is a fast disk optimizer that can be used for floppy disks and hard disks. Supports new Kickstart 2.04 features including hard and soft links and High Density drives.

☐ ^+ V0685 ASTRO ASTROLOGY V3.5
Astro_22 as released is a starter program which accurately calculates the position of the planets, cusps and zodiac positions to within 30 seconds of arc. I intend to increase the usefulness of the program to eventually cover all aspects of the subject which will appeal to professional as well as novice astrologers not wishing to pay 200+ for a decent package. Updated version

☐ ^+ V0489 AMIBASE PRO II
Latest database program which is an update

☐ ^+ V0827 REPAIR IT V2.01
An essential set of tools for recovery. Disk speed reports the speed of a selected drive. DiskSalv will try to recover as much data as possible from a corrupt disk. HDTool will install the OS3 disk caching and FFS to the hard drive of a lesser operating system.

☐ ^^ V1661 NATIONAL LOTTERY
This is a national lottery prediction program called Lottery Winner. It consists of a database system which can record the National Lottery results from week to week until it has sufficient data to make certain types of predictions or just a random guess.

☐ ^+ V1679 COP THE LOT
Lottery prediction/database which can store the previous lottery results and also select random numbers etc.

☐ ^+ V1771 COURSE FORM
Like to put a bit of money on the horses? This utility allows you to enter the figures for the horses in a particular race, plus the course details, and then it will try to predict the winner of the race. Good.

☐ ^+ V1778 LOTTERY CHECKER
is a great tool for checking lottery numbers. Good for office syndicates. Find 'A' Date is a database which stores and matches people up for blind dates. Sneaker is used to view and change binary files, technical users are always finding these programs useful.

☐ ^* V1836 MRBACKUP V2.1.4
is a hard disk backup program for the Amiga. It provides a wide range of services to support Amiga file management and backup/restore of files to/from hard disk.

☐ ^+ V1932 X-FILES GUIDE
If you are interested in the x-files. It contains over 674k worth of text, ranging from episodes 1 & 2 to the x-files transcript.

☐ ^+ V1949 MORE HD INSTALLERS
Installers for the following games: ABASE, Amie 2, ATR, Bump 'n' Burn, Naughty-ones, Rise of the Robots, Sensible World of Soccer, Shadow Fighters, Lion King, MKII_PAFIX, Parasol Stars, Rock'n'Roll, Skimarks 2, Skeleton Krew, Super Stardust, SoftBB, Trolls etc.

☐ ^+ V1965 BALLS
It can predict random numbers or numbers from preentered numbers of upto 72 weeks earlier. A well presented lottery predictor, if your into all the lottery hype get this

☐ ^* V1969 AQUARIUM SIMULATOR
3d Aquarium Simulator (uses MUI2.0). check it out.

☐ ^+ V1982 SCOUT V2.1
Allows you to monitor your computer system. It displays many different things like tasks, ports, assigns, expansion boards, resident commands, interrupts, etc.

☐ ^+ V1983 DOPUS UTILS 2
This is the second selection of utilities for use with the most popular Amiga Disk utility Directory Opus.

☐ ^+ V1997 LOTTERY PREDICTOR
For a start this one uses intuition fully so it multitasks and it uses only a small window on your workbench. Also it looks very nice! The added touch of the lottery symbol makes all the difference. The best lottery predictor yet.

☐ ^+ V1998 AMIGADOS GUIDE V1.5
A very handy program for those who want to learn more about Amiga DOS or those who simply want an easy reference for commands etc. The program consists of an easy to use point and click system with a index.

☐ ^+ V1999 COP THE LOT PRO
This one will only generate random numbers, there is no option to actually make any sort of calculated prediction. There is also a Numbers drawn database and a My guesses database to help you keep a record of the numbers you have been choosing.

☐ ^+ V2001 NATIONAL LOTTERY
This program is more than just a random number generator. It uses uses a special History formula with Chaos Theory to produce a more accurate prediction.

☐ ^+ V2004 LOCKUP V4.0
is the newist version of the old utility Lockup which basically allows you to Lockup your hard drive with a password to enter and get it going again.

☐ ^+ V2005 SHAPE SHIFTER 3.2
is a multitasking shareware Macintosh-2 emultor for the Amiga. It allows you to run mac software withour additional hardware. New updated version.

☐ ^+ V2014 MESSY SID 3.0
this is the latest verion of which will read and write PC Floppy disks 720k or 1.44 if your drive can take it.

☐ ^+ V2015 MOVIE MAKER 2.0 (AB)
have you ever wanted to create your own movie and see it flourish in the Oscars, then nows your chance.

☐ ^+ V2026 ROUTE PLANNER
Highway trip planner. Requires MUI 2.2

☐ ^* V2051 DOPUS 5 EXTRAS VOL 1 (AB)
This set of disks contains a selection of new archives for use with DOpus v5.0

☐ ^* V2060 GFFT SPECTRUM ANALYZER
GFFT Version 2.03 is the update to GFFT version 1.12. The GUI is improved considerably (allows any font and screen color setup, has progress indicator, uses tooltypes, etc.), more features are added, bugs are fixed, and a new SpectrumAnalysis.guide is included (with lots of pictures) to explain spectrum analysis.

☐ ^* V2072 VIRUS_CHECKER V6.04
Best virus killer on the Amiga to date. Updated version with bug fixes and updated virus information.

Workbench & MWB

☐ ^* V1043 SUPER DARK V2.1A
A screen blanker with some special features. It is similar to the After Dark screen blanker in the PC and Mac worlds. Features include a lot of different screen effects, a screen locker, and more.

☐ ^+ V1964 COLOUR WORKBENCH
Allows you to basically change your workbench screen to purple or whatever colour you fancy. It also changes the font from the usual workbench one to one that is really small. There are icons which allow you to change the one's you already use to some they have. They have also included some backdrops for you to use.

☐ ^+ V1968 STAR TREK BACKGROUNDS
Heres some new backgrounds for workbench all based around the Star trek T:N:G series.

☐ ^^ V2045 ICONIAN v2.96
OS3.0 icon editor, NewIcon support.

☐ ^+ V2048 CALC
Arbitrary precision calculator/language

☐ ^* V2053 BLITZBANK V1.53 [1.5MB]
is a very powerful personal accounts system and is ABank compatible. 1.53 fixes two important bugs of the version 1.52 I couldn't wait for having new features because these bugs were really too annoying.

☐ ^+ V2061 BERZBENCH V1.1C
Probably the best patterns for WB

☐ ^* V2062 ICONO GRAPHICS V3.0
is a collection of eight colour icons for Workbench 2 and 3. All standard system icons are included, with many additional icons (PD/Shareware programs, different types of data, custom drawers, and ToolManager dock icons). This release includes about 350 high quality icons. Every icon contains an alternate image that is displayed when the icon is clicked on.

☐ ^^ V2063 MWB IMAGEDRAWERS
This is a full MWB image drawers' collection, I added 42 new drawers since the first release (MWBDrws_474). I was tired of wastin' time every time I was searchin' for a particular image drawer, so I collected all the drawers I found on Aminet in a single collection. I hope this could be useful to someone else, but if you still prefer searchin' through all Aminet files... good luck!!

☐ ^* V2064 100 USELESS PATTERNS
102 background patterns in 2, 4, 8 and 16 colors.

☐ ^^ V2068 JTE MAGICWB ICONS 5/6/7/8
This package includes 90+ new MagicWB icons. JTE MagicWB Icons 6 - This package includes 37 new MagicWB icons, 1 WB pattern, 2 TMbrushes and 98 lame Pattern icons. JTE MagicWB Icons 7 - This package includes 60 new MagicWB icons. JTE MagicWB Icons 8 - This package includes 30+ new MagicWB icons.

☐ ^^ V2069 BREATHTAKING PATTERNS
Contains 11 photo-realistic backgrounds: Beach.png, BricksGrey.iff, Clouds.png, Confetti.iff, Mountains.png, Pebble.iff, Storm.iff, Stucco.iff, Terrace.png, Thunder.png, Valley.png. You need a PNG-datatype and a program to adjust 16 colors of your Workbench to the right colours.

☐ ^^ V2070 MWB ICONS, PATTERNS
A collection of really nice MWB compatible stuff. Guide included.

Emulators

☐ !+ V0817 A500 PLUS EMULATOR
Have amiga 500 and want workbench 2.0 then just install this disk onto your floppy 1.3 version of workbench or your HD for complete WB2 compatibility.

☐ ^* V1178 KICKSTART 3 EMU
Kickstart 1.3/3.0 emulator and decibel patch program will give you the option to have kickstart 1.3 or 3.x(as used in NEW Amigas) in your Amiga. This is much enhanced over the version that was given away free.

☐ ^+ V1336 THE BBC EMULATOR
Contains commands to allow existing files to be transferred from a BBC with DFS by means of a serial cable.

☐ ^+ V1659 MSDOS/AMIGADOS V2.3
This is a very interesting utility which should be useful to anyone who uses both PCs and Amigas. The tool allows you to create a directory on which you can store MSDOS commands and then they can be used through the shell as if they were AmigaDos commands. Great.

☐ ^^ V1868 PC TASK V3.1
is the first and only software 80286 emulator for the Amiga range of computers. Transfer files between your Amiga and MSDOS. Compatible with MS Windows 3+

☐ ^^ V1931 ZXAM v2.0
The latest Spectrum Emulator available. Basically it allows you to run Spectrum software on your Amiga. Requires the AGA chipset but does require WB3+ and a 68020 CPU or better

☐ ^* V2059 FRODO V2.2
Frodo is a multitasking freeware C64 emu for the Amiga. OS2.1 and a 68020 (or better) are required, as well as copys of the original C64 ROMs, which are not inc.

Office & Print

☐ ^+ V0575 HOME BUSINESS PACK (6)
QED, Text editor. Text Plus 2.2E, Word Processor. AZSpell, Spell Checker & Dictionary. BBase, A Database program. DATA EASY, Another database. BizCalc, Loan calc. LCD, Calc. SPREAD, Spreadsheet. Budget, Personal Finance. UNITS, Various conversions. CLERK, Small business accounts. SUPERDUPER, FLASHERCOPY, Copier's. TYPIST, Typing Tutor. BOOTX, Virus Killer. SYSINFO, System analyser. DOS-MANAGER, Directory program. FONTLIST, FONT MANAGER, Utilities. PRINT STUDIO, Printing Tools. (6 disks)

☐ ^+ V1114 PRINT LABELS UTLS
Includes various programs like DOC DUMP v2.1, ENVELOPE PRINT v1.20, INLAY MAKER v1.4, MC MASTER v1.1, BANNER v1.0, LABEL PRINT

☐ ^+ V1279 PRINT A CARD
Want to print a business card or any other type of card then this is the software for you.

☐ ^+ V1222 PANASONIC STUDIO
The PanaPlus driver is a software for controlling printers with the Commodore Amiga personal computer.

☐ ^+ V1236 INVOICE PRINTER
Invoice printing that we help aid any small business.

☐ ^+ V0928 LITTLE OFFICE
Its the all rounder do everything, all knowing, all seeing?? Well lets just say its very good.

☐ ^+ V1179 FILE-O-FAX
was designed to enable computer operators to be able to work at their leisure without worrying about forgetting those important meetings,what they had to do on any particular day or locating business colleagues tele no's.

☐ ^+ V1467 AWARD CONSTRUCT
A very handy tool for creating your very own awards and certificates. There are many styles, fonts and graphics to choose from. could also be used to make small posters, signs or leaflets. Easy to use and very effective.

☐ ^+ V1069 PRINTER DRIVERS HP
Deskjet 560 colour driver, Deskjet 500, Deskjet 500c, Ricoh HP1200 400dpi, Canon LBP, Canon BJ300, BJ130, BJ10e, Canon_48, Canon PJ 1080a, HP Paintjet.

☐ ^+ V1278 MAIL-O-DEX
An excellent way to keep names, addresses, Phone numbers, comments etc and then print out labels loads of them in 1,2,3 and 4 columns.

☐ ^+ V1044 FANCY PRINTING
BANNER v1.4, GRAPH PAPER v1.2, DISK PRINT

☐ ^+ V1357 CITIZEN MANAGER
The Citizen Print Manager has been designed in conjunction with Iresesoft.

☐ ^* V1051 EASY CALC PLUS
is a spreadsheet designed to be both easy to use and fast. If the program looks nice, that wouldn't to be bad either. Unlike other software where the author writes the program first, then bolts on a help system, I have designed the help into the program from the beginning.

☐ ^+ V1184 AMIGA DIARY
Amiga Diary is a mouse driven diary capable of storing all personal events and the perfect solution to all those forgotten birthdays, missed appointments etc.

☐ ^+ V0366 600 BUSINESS LETTERS
Over 600 Standard business letters on this disk. Can be used as they are or insert parts into your own letters

☐ ^+ V0782 FORMS UNLIMITED
Designed to help you design and print different forms. There are a wide number of options and controls which allow you to draw simple boxes, lines, etc in order to create forms for many different purposes. Good.

☐ ^+ V0390 AMIGA FOX DTP
The first amiga PD Desk Top Publishing program. Excludes various extra features over the old Word processor, Text Editor, Graphics editor and loads more.

☐ ^+ V1680 AWARD MAKER 2
This is a very good tool for the creation and printing of Awards and certificates. There are hundreds of types to choose from then you can choose a font a border and also some of the text etc. Very good results.

☐ ^+ V1751 PRINTER DRIVERS
CANON600 v2.0: EPSON FX 850 v1.0 & LX 800, HP4DRIVER v35.8, HP4LSETTER v2.01

☐ ^+ V1858 DB V2.5
Small/fast database program that I wrote after having tested numerous other PD database programs and always found something lacking or irritating me. They might have dozens of features not found in db, but they lacked font sensitivity and a standard GUI look & 3.0

☐ ^+ V1862 INVOICE DATABASE V2
Intra is a rather simple, but therefore easy to use database program that was especially designed to deal with invoice information. Everybody, as we like it.

☐ ^+ V1865 LEGAL FORM GENERATR
Generates custom do it yourself legal forms. Database includes forms useful for EVERYONE, plus specialised forms for real estate, small businesses, landlords, employers, etc. Can save you THOUSANDS.

☐ ^+ V1995 BEGINNERS TYPING TUTOR
This is by far the best typing tutor for years I have seen on the Amiga. It is worth every single penny. It consists of two games, one is called the letter game and the other one is called the word game. On the word game you have to type a word in before the timer runs out. A must for all typers.

☐ ^+ V2003 REM DATE V2.0
Rem Date is a calender, reminder and filofax all in one. I found it quite good to use and would definetly buy the registered version which is availble from the author.

☐ ^+ V2019 TEXT ENGINE v3.0
Allows you to make your every own letters and documents then print or store then on disc.

3d & Graphics

☐ ^+ V1247 TEXTURE MAPS (ABC)
A collection of textures for use with the any program that will take high res textures.

☐ ^^ V1554 IMAGINE BUDDY (AB)
Here's some features of the new interface: Draggable and Sizeable text and index windows ☐ Button Gadgets for the Search and Move functions Improved Searching. The text is now positioned at matching hypertext links and all matches are highlighted for visibility.

☐ ^* V1229 MAIN ACTOR V1.53
This is an all round animation utility that will create, playback, time and edit animations of any length or format (including graphics cards). Very good. (AB)

☐ ^* V1811 IMAGESTUDIO V2.0 (AB)
is written for the casual graphics user who wishes to convert or manipulate various graphics formats on a modest Amiga system.

☐ ^* V1891 IMAGEDESK V1.6
Will catalog picture directories by generating small representants of the pictures, so called thumbnails.

☐ ^+ V1907 POVRAY RAYTRACER
Renders in a window on a public screen (even Workbench) with colour sharing. simple HAM/HAM8 support autodetects Cybergfx Screen and renders in direct Colour (15/16/24Bit) if possible.

☐ ^+ V1916 XFIG V1.2
This is an Amiga port of an X11 structured drawing tool that lets the user interactively create and manipulate on objects such as lines/circles rectangles/splines/text and other elements. Xfig can produce output in several different formats: Encapsulated PostScript, IBMGL (HP/GL), Pic, PiCTeX, LaTeX, box, epic, eepic, eepicemu, textyl, tpic, X11 Bitmap, X11 Pixmap and gif.

☐ ^+ V1922 REAL 3D V2.X OBJECTS
Objects are pretty large in size, especially the 4 cylinder engine, you might run out of memory pretty fast. My Amiga 4000EC30 + FPU is now equipped with 16MB RAM, and I can now raytrace all of my objects.

☐ ^+ V1925 SPACEDOCK STATION
* 1.3Mb, so you'll need a healthy chunk of memory. * No Slicing was used in modelling, to keep things as small as possible. * Space Doors open using the new States function. * Marquee of Space Door lights.

☐ ^+ V2042 RAY STORM v1.11
Fast raytracer with many features

☐ ^+ V2047 SVIEW v5.10
SuperView V5.10 + Library 12.2

☐ ^+ V2057 IMAGINE OBJECTS 1 (AB)
Contains a selection of objects and extras for Imagine -

Comms

Why not check out our BBS (0181) 2510077

☐ ^* V1745 TERM V4.2 [030]
latest version of this very well known comms terminal program. Version 4 has even more features and although it is not for beginners it is probably the best available.

☐ ^+ V0979 NCOMM V3.0
is a comms program based on Comm v1.34 with lots of very nice enhancements. Has new functions over v2.0

☐ ^* V1722 AMIGA TO PSION S3/A
is a implementation of the Psion link protocol which is e.g. built into the Psion S3/S3a ROM. It's main purpose is to provide vice versa nfs like file access.

☐ ^+ V1852 FINALFAX 95
This is one of those arexx macros which are very handy for automating the more tedious jobs on your Amiga. This one allows you to select options for GPFax from within Final Writer. That means that there is no need to switch from Final Writer to Workbench.

Educational

☐ ^+ V1079 KEYBOARD TRAINER
This program only concentrates on basic keyboard skills, and is in effect, still a Beta Version, I think you will find it a vast improvement on most so called tutors.

☐ ^+ V0793 AMIGA BEGINNER
You asked for it! A tutorial for the beginner on using your amiga! Covers the CLI and Workbench, its great for learning about the Amiga. Also contains numerous beautiful 16 colour icons for WB v2.04.

☐ ^+ V1845 DPAINT 4 BUDDY (AB)
Will teach you how to use Dpaint 4. it works by running along side the well known paint package providing hands on demonstrations of the various features. It is a very good way of learning a program so you want to learn DPaint then this System is one of the best ways.

☐ ^+ V1881 AMIGATRAINER
very powerful & flexible program to learn foreign languages. You enter the words yourself, so they aren't related to any special language, school or book. every word there are 2 additions to enter.

☐ ^^ V1897 GEOGRAPHICAL ATLAS
AmiGlobe is a geographical atlas that allows you to navigate in the world map, zooming everywhere, get country data, etc. Requires 2Mb of RAM. (AB)

Music

☐ ^+ V1269 THE OCTAMED TUTOR
Welcome to the Octamed Tutor, a simple guide through the basics of this excellent music program.

☐ ^+ V1207 OCTASTUFF
Welcome to OctaStuff, a disk based around work with OctaMED 3 and 4.

☐ ^+ V1882 ART OF NOISE TRACKER
NEW tracker, NO ProTracker Clone!, 8 channels, fm synthesis, drum sequencer, wave table synthesis.

Tips and Cheats

☐ ^+ V1416 EYE OF THE BEHOLDERS
This disk contains a selection of utilities and software for Eye of the Beholder II, like end of level saved game file, Eye of Beholder 2 special quests explanation, EOB2 Character Editor, Eye of the Beholder Solution, GIF pictures of all 12 levels in Eye of the Beholder.

☐ ^^ V1687 (AGA) FIXES VOL 1
This program disk will help AGA machine users get some added compatibility out of their older software. Don't forget many supposedly incompatible programs will work on the AGA machines by suitable adjustment of the boot options. (Hold down both mouse buttons).

☐ ^+ V1773 ACTION REPLAY CHEAT
This disk has on it a text file which contains loads of codes for those people who have action replay devices. There are cheats for hundreds of games. Good.

☐ ^+ V1468 GAMES HD INSTALL
This disk provides you with the software needed to install certain games onto your A1200. The games that this disk can install are BodyBlows, Goal, Lemmings 2, Superfrog, and Walker. Could be very useful.

☐ ^+ V1662 HD GAMES INSTALLER 2
Contains a variety of hard disk installer's for a few well known commercial games. These games are as follows: AlienBreed 2 AGA, Jungle Strike, Assassin (Special Edition), Body Blows, Goal, Ishar 2, Zool 2 AGA, Ruff and Tumble, Body Blows 2 AGA, StarDust, Super Frog, Walker, Rise of the Robots, Bubble and Squeak, ElfMania, Aladdin AGA and Motal Kombat 2. Great.

☐ ^+ V1885 NEW HD INSTALL
Hard Drive Install scripts for 3 games, Beneath a steel sky Flashback King's Quest VI. New updated version (small bugs fixed from last version).

☐ ^+ V1988 DUNGEON MAPPER V0.3
This is the first version of something called Dungeon Mapper. It will work on Workbench 2+. It allows you to design your own maps for games like Dungeons and Dragons which can be very useful. It also has Tetris on it if you boot it from Workbench.

☐ ^+ V1994 CHEATS COMPILATION
This disk is a demo which gives you a taster of what you can have if you buy the regestered version. The demo gives you a choice of about 15 games to chose from.

☐ ^+ V2040 SW CHEAT v4.5
Over 950+ game hints/cheats.

☐ ^+ V2041 F1GP Ed v3.03
Formula One Grand Prix / WC Editor & F1GP-Ed non-english translation files & Track data for GPDisplay

☐ ^+ V2056 TREK-THE GUIDE V1.6
Trek-The.guide is a complete Star Trek Database. It contains a listing of all the Trek series' complete with an episode synopsis, original airdate.

☐ ^+ V2000 BACK DOOR V6.0
There are cheats & tips for hundreds of different games including a lot of recent titles. There are even long entries for games such as Dune II, which is a tactical game, detailling good methods of play

GAMES

☐ ^^ 4431 BEST AGA TETRIS
Best pentamino tetris. graphics, musics, 100% assembler

☐ ^+ 4434 BLACKDAWN v2.1
3-level Dungeon Master style Alien Breed- charge around the maze levels, shoot lots of aliens, find the lift & move on. but do it in 1st person perspective view.

☐ ^+ 4442 SCORCHED TANKS V1.85
Artillery tank game. Contains loads of goodies like 70 weapons and 13 shield types as well as new goodies.

☐ ^^ 4449 PSSST
This is a 1990's version of the old Spectrum Classic PSSST Main features include: - 256 Colours. - Real Time frame rate. - No C code !!! (I Hate C) - Nice end of game sequence. - Three Levels of play.

☐ ^+ 4451 LAST LAP
is a car game for one or two players. It is excellent in two player mode. There are about 10+ different tracks for you to race around. Some of them are quite easy at the start but as you go on they get a lot harder. On the tracks they have these squares which if you drive over it shoots you on even faster they you are already going.

☐ ^+ 4452 SPELL TRIS
Tetris style game but the main difference is you use letters instead of just shapes.

☐ ^+ 4454 BATTLE TRUCKS
is a one or two player game in which you choose your own truck and then buy it. You can add nitros, new motors or even buy a brand new truck with your winnings from your races.

☐ ^^ 4457 SCREECH V1.5
This demo ame offers you the oppurtunity to run anything smaller than your car over! Improved graphics are on the way (whoopee!). Req 020's with 1MB chip ram and 5MB fast ram or 030's with 1MB chip ram or 700kb chip ram and 300 kb fast RAM.

☐ ^+ 4459 SUPER EARTH DEFENSE V1.5
is a classical shooting game.

☐ ^+ 4463 BOULDERDASH 64
A complete OS-friendly (multitasking) Boulder-Dash with C64 graphics and sounds. 68020+, AGA only (DBlNTSC required), KS V39, asl.library, powerpacker.library. Smooth scrolling !275(!) original C64 levels+sounds, Cheats, Joystick and keyboard control, User definable games and levels, two player game.

☐ ^+ 4464 BREAKIN' BRIKS V1.0
Great version of the very cool Breakout type game. For AGA Amigas only. Works with 2Mb CHIP memory! - Improved performance with FAST mem. Great GFX.

☐ ^+ 4465 CHAMP'SHIP MANAGER ED
It was written because we had played the game to death & were looking for a way of putting some interest back.

☐ ^^ 4466 DPACMAN AGA
15 levels and 5 bonus levels. The registered version has 50 levels and 15 bonus levels and extra gfx and other improvements.

☐ ^+ 4467 JOUSTER 3
If you haven't heard of the good old favorite, Joust, then you're a pretty young or fairly old dude. :) Anyway, this game brings Joust to the Amiga and also has improvements such as powerups, etc. You can even have a pterydactyl as a steed. For 1 or 2 players. Check it out.

☐ ^+ 4468 PATCH LEMMINGS 2 TO HD
Patch to allow Lemmings2 to run from hard drive.

☐ ^+ 4469 CRITICAL HIT
is a highly detailed fantasy combat game, which re-creates tabletop war gaming on the Amiga (requires 1 MB RAM). A strategic war game with excellent graphics, 3 D landscapes and a wide variety of fantasy combat figures and scenery - Campaign and map designer.

☐ ^+ 4477 WIZZYS QUEST
is the best PD platform/puzzle game I have EVER played, so despite its bugginess (see below) I thought I'd upload it to Aminet. Wizzys Quest has 50 levels, getting progressively harder.

☐ ^+ 4479 BOB THE AMAZING LEMON
Amazing Pac Man clone which features a level editor, changeable music and many different wall and floor types including appearing walls, ice and water.

☐ ^+ 4485 LEGEND POUNDS ISLAND
Here we have an adventure game. Half graphical, half text based this game is played almost entirely using the mouse. Backdrops with objects to examine or use

☐ ^+ 4486 MASH
An excellent game. You choose to control either a Spud (a potato on legs!) or a Tank. You then need to tackle a whole load of obstacles in order to get the enemy on the other side. Great graphics, great sound an allround classy.

☐ ^+ 4488 PSYCHEUAL
An Alien Breed clone. You are a bloke with a machine gun who has to run about each level shooting other people and aliens. The level graphics are good and show a lot of detail plus the gameplay is not too easy either.

☐ ^+ 4552 H.E.R.O
Something is going to happen. A big interactive event is going to take place. We are about to release a game which we had to miss for a long time now (too long if you ask me!). Coming soon is an Amiga version.

☐ ^+ 4553 ARMORED COMBAT EDITION
Full version of pete w storonskij's mangled fenders: Armored Combat Edition! Drive tanks from six different countries in a demo-derby game with weapons! This FULL VERSION is freely distributible, as long as all files are intact and present. Uses Memory Conservation Protocols to make sure the game will run on low memory

☐ ^+ 4555 TRAIN DRIVER SIM V1.6
Profile chart generated in real time showing next 10 miles - Fog, in addition to Dry/Wet - visibility 100 yards, very slippery rail - Data updated and more crossovers added between Crewe and Carlisle - Key press detection improved - Now creates timings for any custom train : If, on the Startup screen, you type in a different Code from the built-in trains in the Save drawer, and then set all other parameters, and then click OK, the program will look in. Trains/ and see if a file exists for that train.

☐ ^+ 4558 INTMERCS
Rebelstart type strategy game. Requires 2MB. For one or two players. Complete with four scenarios.

☐ ^^ 4559 WORMS MAPS
These are a buncha maps me and my flatmates made for the amiga version of worms... Descriptions as follows :- TUNNEL.WRM Underground warfare. ISLANDS.WRM Ninja Ropetastic!. SCREAM.WRM Version of pic I found on AMFormat Gallery. TRIPINTOWAR.WRM Weird, spacy theme, with shafted palette (Was called NECROMUNDA.WRM in previous release). NECROMUNDA.WRM Ohh..You'll LOVE this one. BENZ.WRM Another shafted palette. But kewl though.

☐ ^+ 4560 DUNGEON HERO
Fantastic RPG like Dungeon Master

☐ ^+ 4561 ELDRITCH V1.35
Top-view adventure hack-and-slash.

New Utilities

☐ ^+ V2073 PRO-LOTTERY 96
Don't believe that lottery prediction is possible? Have a look at Pro-Lottery, and you might find that you begin to think otherwise! It DOESN'T pretend to guarantee you a jackpot win, but it does genuinely improve your chances of regular small-medium wins. Ideal for syndicates or individuals.

☐ ^+ V2074 PRO-FOOTBALL
An extremely easy to use, yet powerful prediction system for use on both football pools and football fixed-odds. Evaluates each match, and presents you with the most likely outcome.

☐ ^+ V2075 PRO-GAMBLE V2.2
An easy to use, yet surprisingly accurate, horse race prediction system. Requires little racing knowledge - just any daily newspaper and 20 minutes! Generates predictions in a useable format (eg: Placepot), and can even calculate your winnings for you!.

☐ ^+ V2076 PRO-GREYHOUNDS
As Pro-Gamble, but for the dogs - very user-friendly.

☐ ^+ V2077 BOOKIE BEATER
Ever been unsure as to which selection in an event you should back? Bookie Beater allows you to bet on more than one, safe in the knowledge that you'll make the same profit no matter which one wins! Can be used for any 'bettable' event.

☐ ^+ V2078 EASY CALC V2.0F
Fast and good-looking spreadsheet

☐ ^+ V2079 EVERYDAY ORGANISER V1.1
Versatile Multi-Program Personal Organiser system. Second Release.

☐ ^+ V2080 FINANCIAL ACCOUNTS
is a shareware accounts program that can be used to help run a small business, or just to keep track of household and personal finances. Various reports can be listed and printed that analyse various aspects of your accounts, ie income and expenditure, VAT, budget progress, account statements, networth, portfolio, etc.

☐ ^+ V2081 PAGESTREAM 3.0I FREE UPDATE (ALL VERSIONS)
To reduce the amount you need to download, we have provided patches from all recent versions. Most people should just need to download a single patch (two files). If you have an older version, the most you will need to download is two patches (four files).

☐ ^+ V2082 APTBBS V1.00 - BBS
is a free unrestricted BBS program. It is hoped that regular users will wish to register their version to show their support. But meantime they can fully access the software to see if it suits their purposes.

☐ ^+ V2083 CITADEL BBS V3.42.Q12
This is the Citadel BBS program. This version will run on any CPU and should run on any Amiga Model with at least 512K and 2 floppies!

☐ ^+ V2084 DAYDREAM BBS V1.20
DayDream BBS is a shareware BBS program. DayDream BBS is a conference based BBS program like AmiExpress, PCBoard, LogicBBS etc.

☐ ^+ V2085 ROLE-PLAYING GAME BBS
This archive contains the executables, support files, fonts, and libraries. It is all you need to run the program. Although disks #2 & #3 are optional, they contain special support files and documentation that really make this program shine.

☐ ^+ V2086 VISUAL E DEVELOPER PROFESSIONAL V0.9
Visual E Developer Professional V0.9 DEMO ©1996 Per Jonsson. A visual develop-environment, like Visual Basic. Requires the language E. Click and drag to make your applications. Write the code in event functions, like Visual Basic. Supports public boopsi gadgets. Visual inherits windows. Layout-functions like spread and align.

☐ ^+ V2087 MISC DISK UTILS
A selection of disk system utilities to format bad disks, undelete files, create your own disk bootblocks, compare files, show black usage, split larger files, virtual floppy disk utility, Noise saver for floppies and hard drives and much much more.

☐ ^+ V2088 BACK-IT-UP 5
Contains a selection of Amiga backup software for your hard drive needs, ABackup v5.11, BackMan v13.0m, DBackup v2.3 AMUI, Fitter, FCRestore and ucdback v9.2

☐ ^* V2089 AGA EMULATOR V1.0
Emulate AGA-chipset on your Amiga.

☐ ^+ V2090 OCTAMED 5 TUTORIAL (A-D)
Is the complete OctaMED V5 Companion in Amiga.Guide Format. We have now released it as Freeware. (copyright retained).

☐ ^^ V2094 FANTASY BACKDROPS MWB
I made these backdrops since i didn't think there were any nice backdrops that utilized the wonderful MagicCopper program. My icon with the appropriate settings for everything is included.

☐ ^* V2095 FANTASTIC W/B V2.0 (AB)
New Magic.WB2.0-style collection, high quality, KI-standard size Icons, Brushs and other MWB-stuff.

☐ ^^ V2098 TWISTED MAGIC W/B
Twisted Magic Workbench features 27 twisted AGA pictures for use with your workbench as a background. Look at it this way: instead of that boring grey screen you now get a twisted picture with a REAL FULL AGA copperlist. This is generated by a tiny program called Magic Copper, which you can find in the 'Misc' drawer of this package. You also require the MagicWB 2.0

☐ ^+ V2099 DEEPSPACE 9 PICTURES
This pic is complete with StarTrek Logo. This is my latest StarTrek project. It was finished 12/4-96 after about 1 week of work. Effective modelling time was about 20 hours. Rendering time for 800x600 is about 5 hours with GLOW on a 28Mhz 040 and 32Mb of ram. The project file will also be uploaded to AmiNet.

☐ ^+ V2100 VOYAGER PICTURES
Closeup on Voyager from above. Modelled in Real3D v3.3. 1024x768. By Anders Erlandsson.

☐ ^+ V2101 WEB PAGE MAKER (AB)
This Web page editor is unique and REQUIRES NO KNOWLEDGE OF HTML. It's easy point and click interface makes Web page creation a snap. The Appetizer is an appetizer for the soon to be released full featured Commercial editor, Page Monster. Appetizer is fully functional using OS 3.0+, but will also run with OS 1.3 with some limitations. Enjoy!

☐ ^+ V2103 PRINTER UTILS & DRIVERS
New updated printer drivers and utilities. HP_CONTROL.LHA (93K) Setup tool for HP-printer V1.66 LJ4800ST121.LHA (46K) LaserJet4 Printer-Driver Package 1.21 PRINTER-SPOOLER.LHA (82K) Printer spooler. V1.1 PSUTILS_V1R16.LHA (183K) Manipulate postscript files v1r16

☐ ^^ V2104 HDCLICK V3.0
HDClick is a program-selector/HD-menu. With HDClick, programs can be started very easily by selecting gadgets with your mouse. You can choose between a Screen or only a small window on the Workbench. HDClick also has an AppIcon and AppWindow-function that make it possible to easily view pictures, texts or decrunch files by dragging icons on the AppIcon/AppWindow.

☐ ^* V2105 BOOT & C COMMANDS
Contains various simple little utilities which can be used within your startup-sequence or from workbench, Blank the Border, Gadgets for Workbench, Bootscreens, Kickmapper, workbench sounds, system speed hacks, start a program, softboot, and the best launcher for your aplications.

☐ ^* V2106 WINDOWS 95 TASKBAR
Contains various programs to enhance your workbench with windows 95 utilities for the Amiga.

☐ ^+ V2107 RAINBOOT
is another bootpicviewer, but it also has several extra goodies. Here is a small list of some of the features: , Shows IFF-ILBM files. HAM is not supported, because it would mess up with the text output. Different viewmodes are also supported, Displays config (and more) while loading on screen, Plays normal IFF-samples.

☐ ^+ V2108 VIRUS WORKSHOP V6.1
Latest version of VirusWorkshop.

☐ ^+ V2109 MAD HOUSE BLANKERS 2.1
is a modular screen saver like others. We tried to make the main program (the "server") more configurable and to program nice blankers - here is the result, we hope you like it! 60+ modules.

☐ ^+ V2110 IMAGE DESK V3.0
is a program to catalog graphics archives by generating small representations of pictures, so called thumbnails. Those thumbnails are internally being expanded into objects which include all essential data of its represented picture.

☐ ^+ V2111 ROUTE GERMANY (ENGLISH)
This is a german of Amiga Route 2.0. It's fully localized, but the english documentation isn't finished yet. I will release the english version, when the docs are finished.

CODE REFERENCES

^+ Works on all machines
^* Req Workbench 2.0 or above
^^ Req Workbench 3.0 or above
(ABC) Product has ABC disk (ie, three)

CUT, TICK & POST

1 .... Cut this advert out
2 .... Tick the disk you want
3 ... Then send it into us as if its an order form, very simple to order.
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HOW TO ORDER SOME FLOPPY DISKS - Select the floppy disks you want, min of 5 please. Please add £1.00 p&p. 1-9 disks £2.00 10 disks for £17.00 & 21 disks for £25.00. Recemended Users hard a hard drive and knowage of cli or shell, but not required. Use of lha command may be required for use with some of the disks listed above. Catalogue disks supplied free with every order.

It's Time for a Change of Gear

IBrowse Ver 1.02



IBrowse has already been voted the Web Browser of choice by the press and its users alike. Now, with version 1.02, IBrowse massively extends its lead over the opposition.

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- Hotlist stores all your favourite web sites, History list shows all the pages you explored during a session. Cached pages for instant backward access.
- Supports animated GIF, JPEG, interlaced & transparent GIF; play or view any sound, graphic or movie using the appropriate datatype.
- Opens on any Amiga screen and supports all video cards e.g. CyberGraphX.
- Load stored or cached pages from hard drive or CD-ROM.
- Includes FTP plug-in to make downloading as simple as point-and-click.
- Fast and friendly module for gopher hunting.
- Built-in support for email - send messages from any page with email link.
- Superb manual and full technical support from HiSoft.
- Requires 3Mb free memory, 3.5Mb hard drive space and WB3.

Upgrade only £5 on disk or free on the web!

£29.95

MediaMagic

MediaMagic is a superb new product for designing and playing quality presentations on your Amiga, at the right price.

- MediaMagic sports an interactive, user-friendly and intuitive interface so that building presentations becomes a joy. Fully compatible with graphic cards.
- The MediaMagic editor uses drag-and-drop for easy, hierarchical positioning of objects and allows the editing of several scripts at once.
- You can use all sorts of graphic images in your masterpiece with MediaMagic's support for all IFF-ILBM data formats, including ILBM-24, which are converted to HAM6 or HAM8 automatically.
- You can incorporate a wide variety of music & voice samples to liven up your presentation: MediaMagic supports common music modules such as Sound-, Pro-Noisetracker as well as Octamed and Octamed Pro (8 voice) & 8SVX files.
- Working with animations is easy with MediaMagic's support for IFF animations in Anim5, Anim7 and Anim8 formats.
- Business charts can be created directly in the program.
- OS 2.x and OS 3.x compatible , simple controls, fully multitasking.
- Requires 2Mb RAM, OS2.x up and hard disk recommended.

£69.95

DiskMagic 2

DiskMagic is the friendliest file manager on the Amiga and now version 2 takes this fine product to new heights of useability and functionality - probably the easiest-to-use and most versatile file management utility on the Amiga. Here's some of the things that you can expect:

- Support for LZX archive format, the new standard in Amiga compression.
- Many new functions including: super-fast delete command, extra filetype options, additional ARexx commands and internal functions.
- New output window preference.
- File encryption.

DiskMagic 2 comes complete with a library of icons for gadgets and a comprehensive user manual.

£39.95 Upgrade £12.95

HiSoft C++

At long last there is a new, and extremely powerful, C compiler for the Amiga, at the right price. HiSoft C++ has two versions, Developer and Lite; here's a brief list of features:

- The Compiler compiles at high speed in line with the AT&T 3.0 C++ standard, is ARexx controllable, integrates seamlessly with the editor, includes a project manager and generates code for 68000-68030 and the 68881/2 FPU. CLI version included.
- The Editor uses multi-windows, is syntax-sensitive, handles as many files as you like, includes an ARexx interface and supports full keyboard shortcuts.
- The C/C++ Debugger (Developer only) uses multi-windows, with drag-and-drop technology, allows breakpoints, variable tracking and much more.
- The Devpac 3 Assembler is included for low-level work.
- The Easy Object Library (Developer only) is included which eases resource handling and use of data structures (lists, large arrays etc.), along with BOOPSI support, error handling with exceptions and online documentation.
- The Hot Help (Developer only) system can be activated at any time and gives you full, expandable online help even with an ARexx port.

HiSoft C++ requires 4Mb RAM, OS2.x up and a hard disk.

£79.95 Lite Version

£169 Developer Version

SMD-100

The SMD-100 is a brilliant new concept for home entertainment. Using your existing SCSI CD-ROM, you can now access the world of Digital Video - superb 24-bit quality video with crystal-clear 16-bit sound. Here's what you can do with the SMD-100:

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- Use the SMD-100 as part of your Amiga SCSI chain or take it, along with your CD drive, next to your normal television, for all-the-family viewing.

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Hot News

TermiteTCP now £39.95!

Cinema4D ver 3 Released!

CD-ROM Prices Slashed!

Phone, write or email for more detail

AWEB-II P58
John Shepard looks at the improvements the commercial version of *Aweb* has to offer.

ATARI EMULATORS P28
If you're dying to play *Arcanoid* again then **Simon Goodwin** has some hints on Atari emulation.

UNDER THE TREE P38
It's Christmas time... Find out exactly what should be waiting under the Xmas tree for you this year.

STOCKING FILLERS P64
If you're strapped for cash then here are a few suggestions.

8-SPEED CD-ROM DRIVE P61
You can never go fast enough and this new drive from Gasteiner comes close.

ADVANCED AREXX P86
Recursive Tree Sorts may not sound like your idea of fun but believe me, it's not as complicated as it sounds.

READER GAMES ON ICE P43
Reader Games with a difference this month. Join **Andy Smith** for a skating extravaganza.



Nick Veitch
Editor

Month In View

1996 has certainly been a year of upheaval and turmoil but there is still hope for the Amiga in 1997...

It may seem that we have been harping on about Viscorp's long-running acquisition saga for ages now, and yet, still it goes on. It has now been over five months since Escom announced their financial problems but the Amiga still doesn't have a new owner.

Is this a problem? Well, of course it is, but it doesn't stop software publishers and hardware manufacturers from bringing out great new products every month for us to review, all you need to do is go out and find them.

We've even got a full commercial game for you to have a look at on page 36. Yes, OK, it is a follow-up but it still shows you that the Amiga is not out of the games market completely.

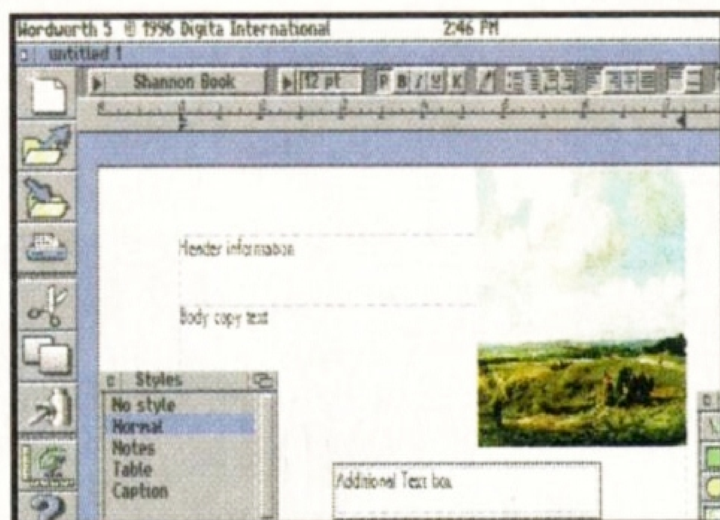
A lot of people ring us up voicing their fears that the Amiga is going to die, that *AF* is going to close and that the world is coming to an end. Apart from that last one which is probably true, here at Amiga Format we are actually optimistic, believe it or not.

Although it may seem harder and harder to find stuff for your machine, the companies that do deal in Amiga products are even more dedicated than ever to giving us products that we want at a price we can afford. Gasteiner's CD-ROM drive this month is a perfect example. 

AMIGA FORMAT CONTENTS

ISSUE 92 CHRISTMAS 1996

AF NEWS


Launched in 1991, Wordworth is a hugely popular Amiga word pro.


President of Amiga Technologies – Petro Tyschtschenko.
Page 11

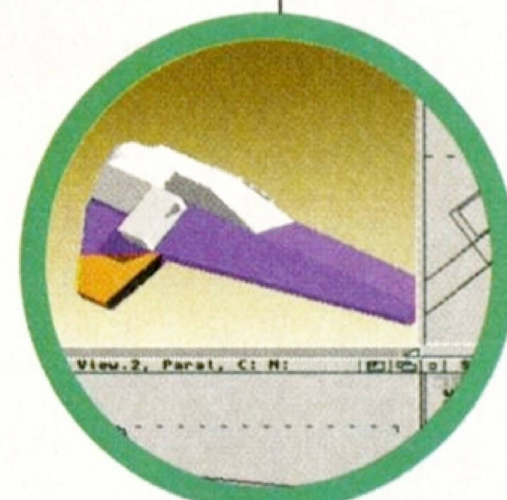
AF SERIOUSLY AMIGA


Atari emulators page 28.


Aweb goes commercial.


Gasteiner goes even faster.

AF CREATIVE



AF REGULARS



Bumper Christmas Giveaway

Because it's nearly Christmas we've decided to give away loads of stuff. Simply send a postcard clearly marked with your name, address and phone number to the address on the box.

Please state clearly on your entry if you do not wish to receive details of other special offers from either Future Publishing or other carefully selected companies.

AF SCREENPLAY



Coverdisks




"World of A1200" & "Top 100 Games" CDs FREE with every CD ROM drive!!!

EXTERNAL SCSI HARD DRIVES

Top quality drives in a top quality metal enclosure with cooling fan, in built power supply and SCSI ID selector.



540MB SCSI HARD DRIVE £234.99

1GIG SCSI HARD DRIVE £314.99

2GIG SCSI HARD DRIVE £399.99

(deduct **£50.00** for uncased drive)

DATAFLYER SCSI+

Now includes CD ROM drivers and instructions.

The Dataflyer is a 16 bit SCSI II controller card that converts the signals on the internal IDE interface to also run SCSI devices at the same time as the IDE hard drive. The Dataflyer SCSI+ will operate up to 5 SCSI devices such as CD-ROMS, hard drives, SyQuest removable drives, tape back up drives etc. Unlike other SCSI interfaces, the Dataflyer SCSI+ is compatible with all known accelerators etc and it does not stop you from utilising any of the important expansion ports on your A1200/A600.



The Dataflyer SCSI+ easily installs into the A1200/A600 (simply pushes in, no need to remove the metal shield) and provides a 25 way D connector through the blanking plate at the back of the A1200. *Full instructions and software supplied.*

DATAFLYER ONLY £79.99 or £49.99 when purchased with a SCSI device

SQUIRREL ONLY £49.99 or £39.99 when purchased with a SCSI device

SURF SQUIRREL £89.99 or £64.99 when purchased with a SCSI device

MEMORY EXPANSIONS

A1200 trapdoor fitting memory expansions feature a battery backed clock and a socket for an accelerator FPU.



NEARLY DOUBLES THE SPEED OF THE A1200

STAR VALUE

4MB MEMORY EXPANSION £74.99

8MB MEMORY EXPANSION £94.99

33MHZ 68882 FPU (PLCC) £29.99 or only £24.99 when purchased with above

MODEMS

Our highly rated, top quality feature packed modems are ideal for Amiga users. All modems include our FREE MODEM ACCESSORIES PACK (worth £19.99) which includes a cable to connect the modem to the Amiga, NCOMM comms software, Amiga Guide to Comms and a list of Bulletin Boards from which you will be able to download vast amounts of free software as well as have access to E-MAIL facilities.



- **MNP 2-4 Error Correction**
- **MNP 5 Data Compression**
- **Fax Class I and II compatible, Group 3**
- **Hayes Compatible**
- **Full 80 page manual**
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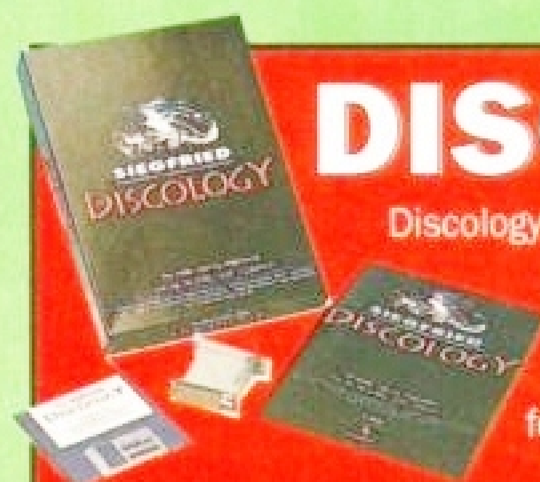
STAR VALUE

14400 MODEM £69.99

28800 MODEM £109.99

NET AND WEB SOFTWARE £34.99

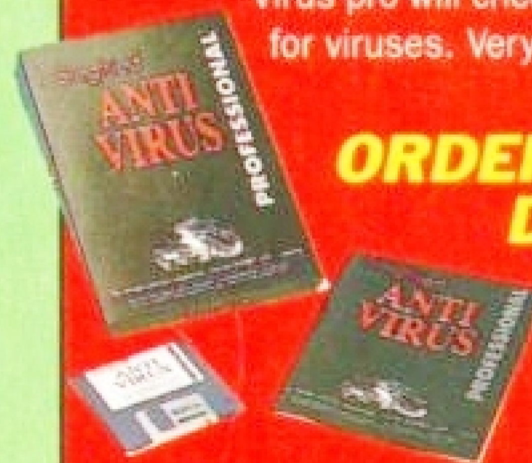
DISCOLOGY



Discology is the ultimate in disk copying power for the Amiga. The package comprises the Discology Disk, manual and Discology cartridge for making copies of heavily protected programs with an external disk drive. Discology will also format disks, check disks for errors etc.

ANTIVIRUS

Anti Virus Professional is the most powerful tool for detecting and removing viruses. Anti Virus pro will check and device hard drives, floppy disks and even CD ROM drives for viruses. Very straightforward to use, includes a full 50 page manual.



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"This month also saw the the first preview of a game called Capital Punishment..."

UNDER THE TREE PAGE 38 

AMIGA FORMAT news

That Petro emotion

Amiga Format received this release from Petro Tyschtschenko, the President of Amiga Technologies in Bensheim.

When Commodore International went bankrupt in May 1994, my goal was to keep the Amiga technology alive. After eight months of negotiations and with the financial help of Escom AG, I had managed to obtain all patents, trademarks and all of the Amiga technology for Escom. At that time it was also clear to me that just buying Commodore/Amiga was not all there was to it. This was only the beginning. It would take at least a hundred million DM to get the Amiga products of that time back into production. Escom financed and I became the president of the new company Amiga Technologies, which was formed in June 1995.

"Days and nights of hard work changed my life and in September 1995, as promised, the first A1200 computers appeared in the shops, followed by the A4000T in November.

"Up to the present, Amiga Technologies sold almost 50,000 A1200's, about 4000 A4000Ts and almost 15,000 monitors. The strategy was to bring the then current products back to the shops in 1995, to advertise the Amiga by January 1996 while starting the development of a new generation which should be ready for the market by the end of 1996.

"But things went quite a different way: Escom got into a financial chaos, even with Siemens-Nixdorf and Quelle as shareholders. Amiga Technologies' budget was cut completely, plans could not be realised any longer, the staff had to be reduced in size, and in the end Escom had to file for bankruptcy in July 1996.

"Up till now, Viscorp Chicago has invested at least half a million DM in buying out Amiga Technologies. Salaries of personnel had to be paid, lawyers, travelling-expenses, etc.

"During my more than 12 years at Commodore, and now two years at Escom as well, I learned how one can reach goals by hard work. I'm still optimistic that it will all come to a successful end between Amiga and Viscorp before the end of October 1996.

Trustee and banks want to keep the AMIGA alive and that's great. As soon as there's news, we'll make it public through the press and on the Internet.

"I sincerely thank you for your loyalty and patience; after all it's thanks to the users we're still here."

VISCORP
VISUAL INFORMATION SERVICES CORPORATION



Amiga Format broke the news of Viscorp's intentions to buy the Amiga back in June.


Petro Tyschtschenko – President of Amiga Technologies.

Bumper Christmas Giveaway

T3 – Tomorrow's Technology Today is the magazine devoted to the latest and most exciting technology. They have kindly agreed to donate some top-secret technological goodies and if you would like the chance to win then send a postcard with your name, address and telephone number to:

AF Christmas Compo • T3 Draw
29 Monmouth Street • Bath • BA1 2DL

BOOKSEARCH

Haage and Partner are looking for people interested in writing all or part of a new book on programming the Amiga.

If you have any leaning toward this topic then why not contact them on 0049 6007 7543 or email them at: **100654.3133@compuserve.com**

WOA TORONTO

If you are a Canadian reader, or just adventurous, why not take a trip to Toronto for the 13th-15th of December this year for the World of Amiga show. Organised by Wonder Computers, the WOA Toronto will have a 20% increase in size on last year.

For more information contact Christine Vetzal on 001 905 665 9135 or Ken McDavitt on 001 613 721 1993. Ken is also available via email at **ken@wonder.ca**

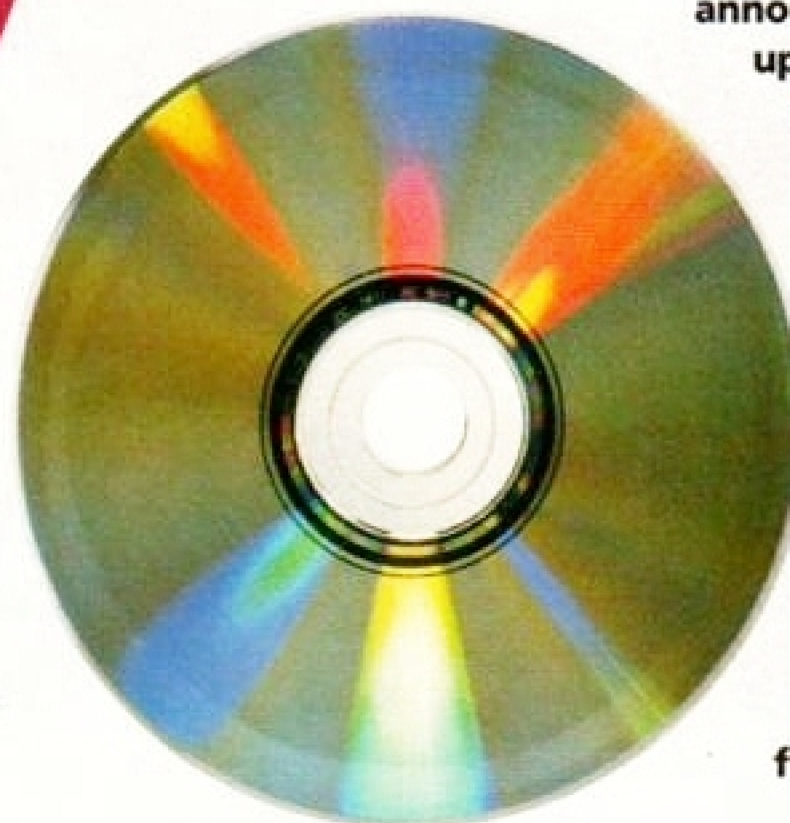
ARTWORKS

You may notice that this Christmas issue of Amiga Format has a festive feel to it. This is all thanks to Artworks who kindly let us use some of there Christmas clipart. All the images are copyright Artworks and if you're interested in any of their products then they can be contacted at: Artworks, 3 Pond Side, Wootton, Ulceby, North Lincolnshire, DN39 6SF. Tel: 01469 588138 or email at: **ArtworksUK@aol.com**

Newer, rounder, Digita

Digita are about to launch their latest version of Wordworth onto an unsuspecting Amiga public.

The new version six software adds new drawing tools, more ARexx commands and macros, more fonts and, more importantly, comes in a CD version with over 1000 pieces of clipart.



Even more amazing is the fact that this new version will retail for just £39.99 on the CD. Digita are also releasing an Office pack which will contain *Wordworth 6, Datastore 2, Money Matters 4* and *Organiser 2* for an additional £10 at £49.99.

As if that wasn't enough, Digita are also announcing new versions of TurboCalc (now up to version four with proper postscript support, auto correction, chart animation and more) and Personal Paint (now up to version seven with enhanced functions for web authors, 180 ARexx commands with scripts available from the toolbar, more file formats and NewIcons support).

TurboCalc 4 and Personal Paint 7 will both retail at £39.99.

Upgrade offers are available for all these products and you can contact Digita on 01395 270273 for further details.

Aweb get updated

AmiTrix Development are pleased to announce the release of version 2.1 of the popular WWW Browser AWeb by Yvon Rozijn. This update, which is free to customers that have purchased the current v2.0 AWeb-II package, is now available from their web page at www.networkx.com/amitrix.

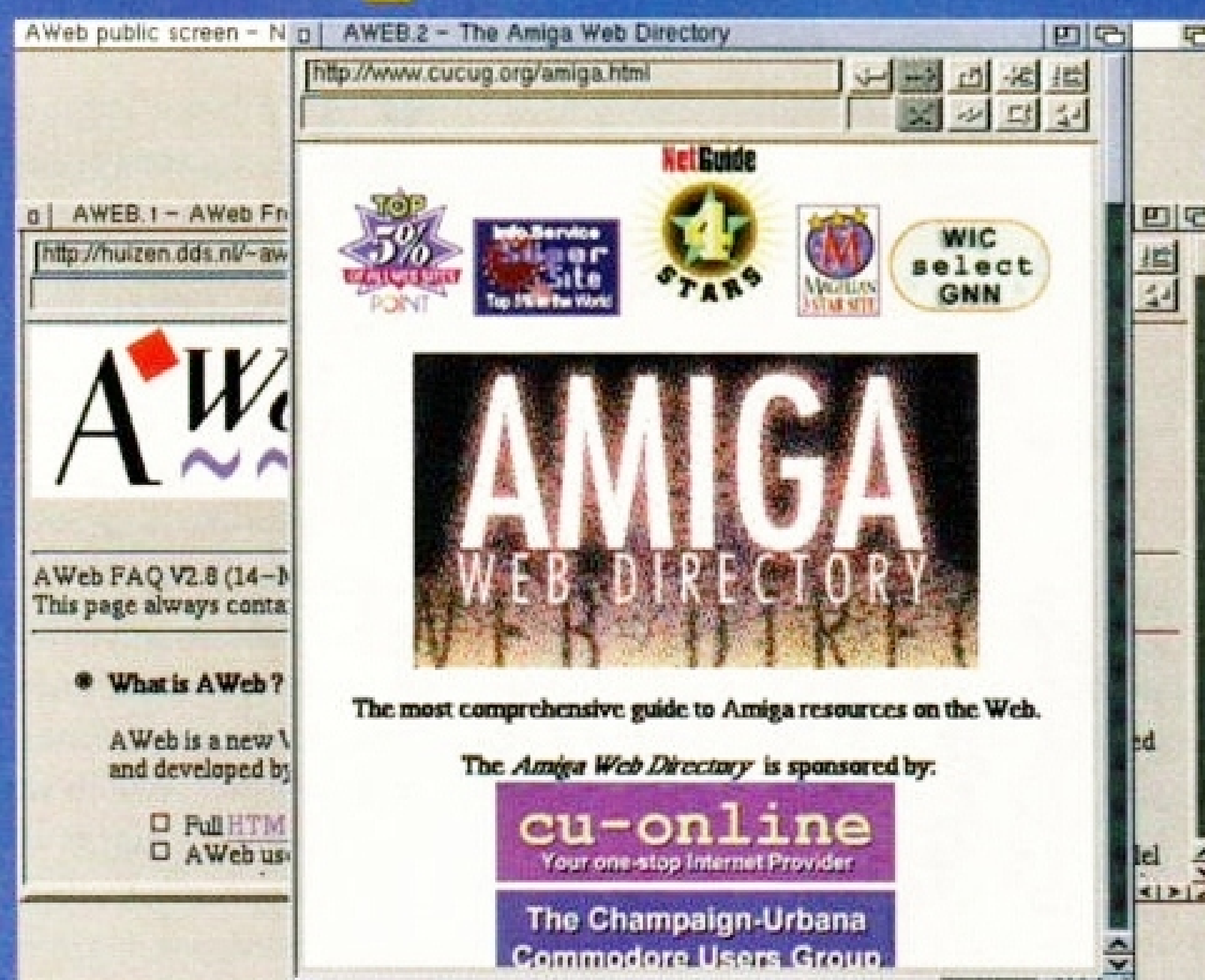
If you have not yet registered your copy, please do so as directed on the AWeb page, or if you have, simply fill in the access form and proceed to the transfer link. Postscript versions of the docs and several datatypes are also available from the page.

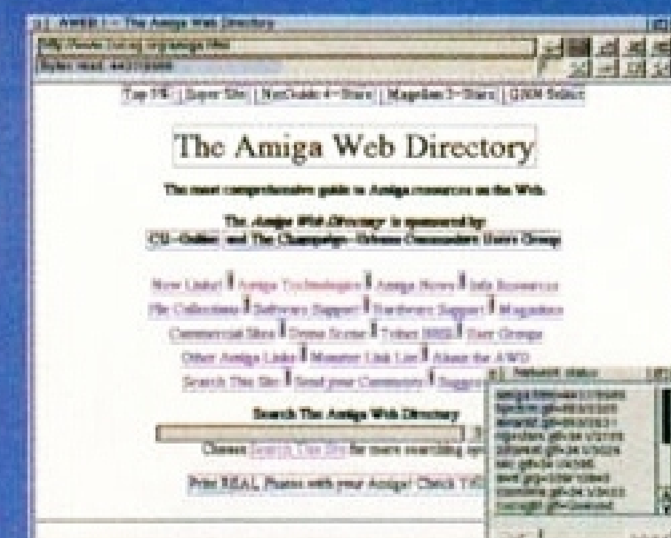
AmiTrix would also like to apologise for the slight delay in making the update available, but illness and some last minute changes made it unavoidable. There was no intent to keep their commercial customers waiting, rather they wish to insure that the update is as reliable as possible, and they thank you for your patience. There will be v2.1 AWeb-II package ready for shipping to new customers by November 15/96.

Version 2.1 of AWeb-II will include the following additions:

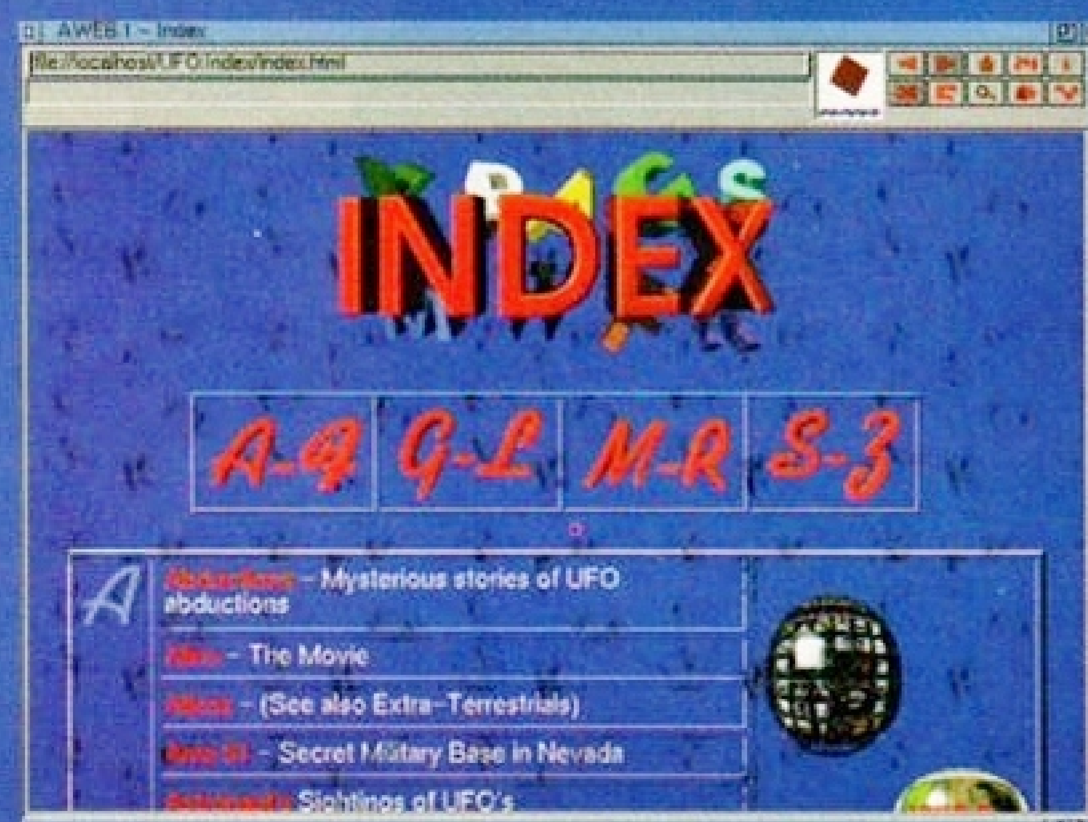
- **HTML 2.0 & 3.2 support including tables, fully configurable disk cache & browser**
- **configuration/settings window re-designed and split into three sections for improved access, separate control of image and background display**
- **support for client side maps and floating images**
- **access to ClassAct prefs**
- **text search function**
- **graphical print function**
- **more ARexx commands**
- **additional mime types**
- **replaceable button images and transfer animation**
- **greyscale palette support**
- **improved page loading speed and memory usage**
- **coloured fonts and style tags**
- **background sounds**
- **popup menu**
- **more compatibility for non-standard HTML code**
- **HTTP cookies, and many other improvements**
- **Revised and improved FTP, MailTo, and HTTX plug-ins with ARexx macros for configuration & setup**
- **Additional internal MailTo support for AmiTCP & Miami**
- **INet-225 SMTPPost, UUCP SendMail, and external mail using AmigaElm, ADMail, or Voodoo**
- **FTP support for FTPMount and AmiFTP.**

Contact Blittersoft on 01908 261466 for further details.

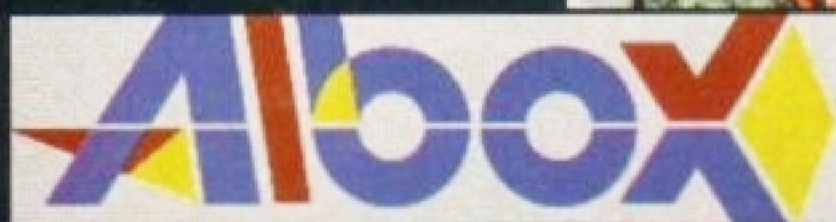




AWeb has improved dramatically over previous versions most notably in the speed department – this version zips along.



What a lot of wires. But if you look closely you can see the PowerPC 603 chip that will power Phase 5's ambitious new developments.



Phase 5 powers up

German Amiga firm Phase 5 has released details of its developer program for its new PowerUp PowerPC/68060 accelerator. Firms from all over the world have been pledging to make their software compatible with the hybrid card as an intermediate step towards the Amiga moving completely over to the RISC chip that powers the Apple Macintosh.

Phase 5 have already started sending developer boards out to companies that wish to ensure their software will work on the new system. Phase 5 are also promising native (PowerPC) versions of their CyberGraphics software and CyberGL, the new OpenGL-compatible 3D display language. The processing power of the PowerPC is so massive compared to the 68000 series that MPEG decoding and realtime screen updates are quite feasible according to Phase 5.

Phase 5 have also stunned the Amiga world by announcing details of their Amiga-compatible computer called A\BOX which they plan to release next year. The new machine builds on the basis of their PowerUp board, but with a radical new approach to hardware design that, if successful, will blow all other computing platforms out of the water.

The A\BOX will feature several custom chips that will control memory and I/O, but the heart of the system will be the bizarrely-named Caipirinha processor. This processor, the cornerstone of the A\BOX concept, will provide unified memory access (imagine having 32Mb of Chip RAM!) for A/V, internal and I/O functions. When it comes to video application Caipirinha won't rely on a standard raster display, but rather random access to all picture elements which will mean that designers won't be restricted to traditional rectangular windows – they can be any shape you like, and will also mean that where necessary, true colour (24-bit) windows can be displayed over a memory saving 8-bit backdrop.

Caipirinha is also talented in the audio department offering two external channels of CD-quality 16-bit stereo sound that is mixed down internally from as many channels as memory allows, somewhat like OctaMED Soundstudio, but in real time.

Other facets of the hardware promised include multi-processor support, RAID support and high speed serial and parallel ports and a firewire connection. Since Phase 5 are already hard at work on porting Workbench 3.1 over to the PowerPC, AmigaDoS will be the first operating system offered for use with A\BOX, but it is likely that MacOS, Linux and NetBSD will also become available.

For more details on this or the PowerUp project you can contact Phase 5:

phase 5 digital products
In der Au 27
61440 Oberursel, Germany

Intl. Phone: +49 6171 583787
Intl.Fax: +49 6171 583789

Email: mail@phase5.de
or: aproject@phase5.de

Companies working on PowerUp projects

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Holger Kruse
Maxon Computer
Nova Design
Oberland Computer
ProDAD
RBM
Computertechnik

The Bradford Column



It was not until September/ October 1986 that the Amiga was first seen by the man in the street. There was no guarantee the Amiga would take off – this was back when home computers had a typical life span of 2 years – and there was just a handful of EA titles available for it. The first purchasers of the system were called either brave or foolish but they just couldn't help themselves.

Once they had seen the machine arrogantly displaying *Robot Jugglers* in a few forward-thinking computer stores they simply had to have one. Not everyone could, of course, but by the following Spring the A500 had been launched and, with the assistance of credit cards and hire purchase, just about everyone who aspired to the machine was able to get one. Millions, in total.

All this was achieved without blanket television advertising but largely through the efforts and enthusiasm of independent computer retailers. If you wanted to see an Amiga in action you had to visit one of these indies because the chain stores would tell you all sorts of rubbish.

"If you want support and assistance who are you going to call? It aint Ghostbusters..."

For a few years almost every outlet under the sun stocked Amigas but if you want support and assistance now, who are you going to call? It ain't Ghostbusters and it certainly isn't your local electricity board showroom – it's the dear old indies: the only sector of the retail market that has kept the faith. Not all of them, of course, and certainly not to the same extent, but it's hardly their fault if new machines are as thin on the ground as an original game in a PlayStation magazine, is it?

If Viscorp ever intend relaunching an Amiga machine – and it's looking more and more like an 'if' instead of a 'when' – they cannot afford to ignore these dealers, they must get them on their side. In the meantime, AF are doing a splendid job by telling you who they are and what they do. And you too, in turn, can help them. Instead of wandering into your local Game or EB when you next decide to buy an item of software, take the time to visit the indies detailed by AF – there's a good chance you'll be pleasantly surprised by what they have got to offer.

Dale Bradford is an ex-retailer who now resides in a sleepy part of Wales where it is perpetually Christmas Eve and he is known as the "richest man in town". This explains why any opinions expressed here are entirely his own, not necessarily those of Amiga Format.

"The Amiga project was started by Atari engineers, but Commodore took it over when Atari ran out of money to fund further development."

ATARI EMULATORS PAGE 28

IN-TO-THE-NET INCLUDES OUT-OF-THE-NET

Weird Science
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INCLUDES OUT-OF-THE-NET FREE

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Getting an Amiga connected to the Internet is one of the most difficult tasks due to the complex installation routines of AmiTCP and the lack of any real guidance. Not only will this situation change but you will now be able to get connected to the Internet and the WWW without a hard drive or the complicated setting up of the software. Our extensive networking skills have really been put to the test providing a simple connection from a compact disc providing a pleasant introduction and connection to the internet. Most of the difficult setting up is done automatically for you with the connection program provided. All that is required is the answers to a few simple questions. In addition the CD contains all the tools required for both the beginner and expert, full instructions on getting connected and many very helpful documents on the Internet and WWW. The tools include AmiTCP, Mail, FTP, WWW and many more. In addition there is a section on WWW page creation with clip art and creation tools. Easy Hard Drive installation possible but not required.

Wondering what all this World Wide Web is all about, worried about expensive connection and telephone bills, concerned that it may not be for you. Well check it out without the connection or telephone charges with 'Out-of-the-Net'. This compact disc contains the contents of actual WWW sites for you to browse with the Amiga browsers provided, no online costs at all. It is all included ready to run directly from the compact disc. The CD acts as an pseudo Internet provider with the sites readily available on the compact disc. There is a diverse variety of sites and subjects covered to give an excellent feel for the WWW whilst you browse for free.

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AMIGA FORMAT GOLD

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LIGHT ROM 4

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Light Rom Four features new royalty free material created with Lightwave 4.0 & 5.0 versions.

LIGHT-ROM 4, a 2 CD-ROM set for the Amiga, Mac, Windows / NT features all new Lightwave objects and scene files. In addition there is a bonus CD-ROM of 3,000 Jpeg Textures, see below. LIGHT-ROM 4 also includes a collection scene files by Alan Chan. This set contains wholly new material and is an absolutely superb resource for Lightwave.

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The 3,000 Jpeg Textures CD contains over 3,000 textures in the Jpeg format. There are thumbnail renderings of every texture for easy previewing. The textures cover all categories including Brick, Bump Maps, Carpet, Cloth, Fabric, Formica, Granite, Greenery, Images, Marble, Organic, Rock, Skin, Stone, Stucco, Tiles and Wood. Realistic high quality textures for a variety of uses are provided in the universal Jpeg format.

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That was the year that was (and this is the year to come)...

Distinguished readers, welcome to another gala performance here at *Amiga Format*. Over the next few pages we'll be taking a look back at 1996, a year that proved to be quite eventful for the Amiga, and *Amiga Format*, before moving on to look at some of the great things that await us in the new year.







January

January didn't make us shiver. There was quite a lot to be happy about. Amiga Technologies had announced the forthcoming launch of a new Internet Amiga bundle, and that Amigas would be sold in Escom stores throughout the land. Of course, the bundle never appeared, and the surly Escom shop manager's hid the Amiga bundles in a disused toilet with a sign saying "beware of the Leopard" on the door.

This was also when *Amiga Format* discovered incompatibility problems with the floppy drive on new machines – a problem which even Amiga Technologies couldn't hope to bluff their way out of.

Amongst the best software on test was the latest version of *AsimCDFS*, AntiGravity's tremendous *IMPACT!* system for *Lightwave*, and the rather tremendous *MainActor Broadcast*. On the games scene *Breathless* and *Zeewolf 2* both struck *Format* Gold, though *Worms* still topped the charts.



We also discovered that David Pleasance could play a mean Spanish guitar, as we toured Tanget's studios where he was putting together an Amiga tribute album.

February

Although still hard to find in the shops, there is more good press for the Amiga when Camcorder User described the Amiga Magic bundle as "the bargain of the century"

Of course the biggest news of all was that *Amiga Format* gave away the very latest version of *Blitz Basic* on the Coverdisk, and started a series of tutorials (still running) due to popular demand.

Our review staff managed to dish out what must have been a record number of *AF* Gold awards – and not without good reason, for this month saw reviews of Epson's GT5000, *Organiser 2*, the excellent *Maple V*, Network CD2 and the EZ-135 drive amongst others. Unfortunately for Impulse, *Imagine 4.0* failed to impress Graeme Sandiford, but a selection of Pro Objects did.

"Breathless and Zeewolf 2 both struck Format Gold."

Andrea Ball joined the *AF* team as Production Editor, and evrybodt's wurk sone loooked a lit beter fur it.

Worms was still topping the charts and has notched up 50,000 sales – proving there is still a lot of life left in the Amiga market.

March

Amiga Format scoop the world with the fastest A1200 accelerator card known to Amiga kind – the Blizzard 1260 Turbo card finally arrives. But we managed to tear ourselves away from rendering huge animations on it long enough to reveal some more exciting news. We were finally able to give solid information about the Amiga Surfer bundle. With a software collection including a reworked version of *Voyager*, the excellent *Voodoo* mail

Continued overleaf ➡



software and a 14.4k modem, it looked sure to shift in large numbers.

It seemed the timing was just right. A massive dip on the American stock market saw Adobe, Apple, Motorola and Intel losing share value, while new Internet companies soared to dizzy heights – Netscape had managed to increase their share value from $28 to $145 in just six months of trading.

Interesting releases this month included *Blitz Basic 2.1*, the tremendous *Personal Suite* CD-ROM from Cloanto, and the quite literally heavenly *Digital Universe*.

April

The big announcement this month was that the UK World of Amiga show was definitely going ahead. It was to be held at an undecided London venue, and dealers and distributors immediately began signing up for it.

In other news, the SX-32 expansion finally became available in the UK, Team 17 announced that they would be bundling money-off accelerator vouchers in copies of *Alien Breed 3D II – The Killing Grounds* and the first annual *Lightwave* Animation Contest was announced.

Wordworth 5 and *Model Monger* popped up in our review pages to claim their Gold awards, and we were also impressed by the ingenious and svelte HD floppy drive from Brian Fowler.

"The UK World of Amiga show was definitely going ahead."

In the games charts, *Sensible World of Soccer* steals the premier position from *Worms*, and there is much debate in the industry about which is truly the more successful game.



May

Lightwave 4 surfaces, and is celebrated by our reader's favourite cover of the year. A huge 5-page review extols it's virtues before lavishing a huge 94% and an *AF* Gold award.

"Viscorp stressed that they would produce an Amiga computer."

We also brought you the first pics of the "new" Amiga being prototyped by Amiga Technologies. Codenamed "The Walker" it was more popularly known as the "hoover" by our readers, due to it's rather unconventional styling.

In the word-pro world title fight, *Wordworth* went up against *Final Writer*, and both managed to come through with a Gold.

Sadly for the office cleaners, who were the only ones who liked him, Steve "Scottie" McGill left *AF* in this month to claim his fortune in the wild North. He was, however, tragically heard from quite often.

June

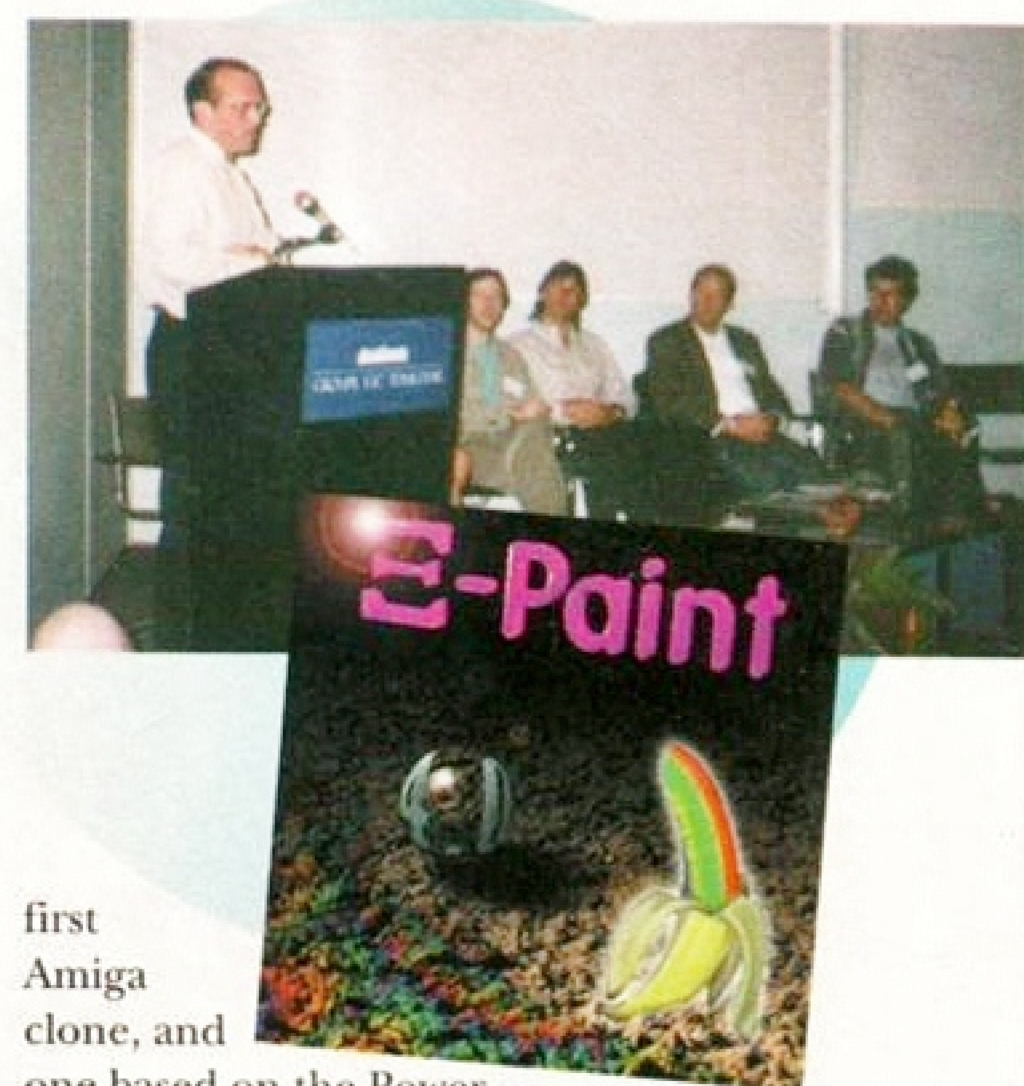
In a spook re-run of just about every June issue of *Amiga Format*, we were able to dust off the "Sold" logo and slap it on the front again. This time, in a rather dramatic and fast breaking story, Escom announced their intention to sell the Amiga and Amiga Technologies to American Internet entrepreneurs, Viscorp. The announcement was formerly made at the World of Amiga show, where Viscorp's CEO, Bill Buck made a stirring speech and promised commitment to the Amiga computer, as well as the technology behind it.

Another good reason to be cheerful was that the June issue was also the first *Amiga Format* covermounted CD – the first Amiga magazine in the world to offer a regular CD every month. Cunningly, we coupled this with a feature showing our readers how easy(!) it was to do this for yourself. Luckily for us, we were also able to review the Tekmagic2060 accelerator, the Iomega Jaz drive and *MasterISO* this issue. What superb planning.

July

Viscorp hold a developers conference in Toulouse, France, and our intrepid news team is there to follow the proceedings. In fact, not only did we give you a blow by blow account of what was said, you could even hear and see it for yourself if you were a purchaser of our CD version.

Viscorp stressed that they would produce an Amiga computer, but many were more interested by the fact that Phase 5 were in negotiations to launch the world's first Amiga clone, and one based on the Power PC chip at that!



Also of note this month were reviews of the rather interesting Siamese System, and the latest version of a German 24-bit paint package which showed some promise, *XiPaint*.

August

To complement our incredible *TypeSmith 2.5* giveaway, we also gave you loads of scaleable fonts and a huge feature on how to use them.

The unsurprising surprise news was that Softwood had released a new version of *Final Writer*, to compete head on with the release earlier in the year of *Wordworth 5*.

Schatzruhe also tied up a deal with Amiga Technologies to produce and











SOLD



distribute the official *Amiga Developer's* CD-ROM, which more or less comprises of every piece of relevant documentation and development tool known to man.

We also witnessed the release of the Surf Squirrel and *Photogenics 2* amongst others, and Graeme started his now legendary *Real 3D 2* tutorial.

As a minor point, some bloke called Vost walked into the building one day looking sad and lost, and the office girls adopted him and made me say he could stay. Still, at least he began earning his keep by starting work on the best cover CD so far.

September

Things begin to get interesting in the Viscorp /Escom deal, as following huge losses, kicking out the CEO, borrowing loads of money and generally looking very shaky, Escom finally goes belly-up. This results in a great deal of confusion over the exact ownership of Amiga Technologies, a situation which is yet to be satisfactorily resolved.

There is also good news for the Weathermine team, who we had featured in a previous issue, as they make a distribution deal for the excellent *XP8* with Effigy.

On the serious side *Final Writer 5* finally arrives, and Graeme Sandiford gets to check out one of Germany's best kept secrets – *Monument Designer* – a titling package popular in Europe for years, but only just translated into English.

"...following huge losses... Escom finally goes belly-up."

October

The shock news this issue is that there will be no version of *Myst* for the Amiga. Admittedly, this doesn't surprise many people, until we reveal the existence of an independently coded demo which proves how easy it would be to do. Thanks to *Amiga Format* and our readers, Brøderbund are now reconsidering.

The news pages also reveal that Phase 5 will be shortly releasing the Cybervision 64/3D card, the first graphics card for the Amiga to feature on-board real-time 3D hardware.





The cover feature on Emulators in this issue proves so popular that Simon Goodwin is sent on a deep fact finding mission to conjure up further instalments. Inspired by his trip to the local Tourist Office, Ben Vost also starts his epic Multimedia tutorial series.

Hottest products reviewed this month include the rather fantastic *OctaMED Soundstudio* and *ImageFX 2.6*

November

SoftLogik promise to continue support for the Amiga. Although Pagestream is now available on the Macintosh, they confirm that version 3.2 will be released for the Amiga – "we would like to thank our customers who have stuck with us through the last couple of years" says a spokesperson.

This issue *AF* paid a special tribute to Germany, and looked ahead to the massive amount of development going on in that country.

In an effort to understand how a group of Canadian newcomers could possibly have created the greatest beat-em-up the Amiga has ever seen, we interviewed ClickBoom's Alexander Petrovic, who explains the phenomenon that is *Capital Punishment.*

Also reviewed this issue, the superb StormC and the long awaited commercial release of IBrowse.

December

And so we draw to the close of a year which started out promising so much, got very dodgy in the middle, and finally ends up with a good deal more to look forward to than anyone could have suspected six months ago.



Following up on leads from industry newsletters, we also kicked off our Shopwatch scheme, where *Amiga Format* endeavours to uncover and publicise Amiga dealers giving conspicuously good service and value for money, the length and breadth of the country. we'll be bringing you an update on this in the new year.

Top of the news is the imminent release of *Draw Studio*, an excellent new structured drawing program from Graham and Andy Dean (the creators of Image Studio), and amongst the host of excellent software on review, you'll find top titles like the *Epic Interactive Encyclopedia*, *Art Effect*, Hisoft's SMD-100 (formerly known as the Squirrel MPEG) and *Directory Opus 5.5*.

Continued overleaf ➡





(and this is the year to come)...

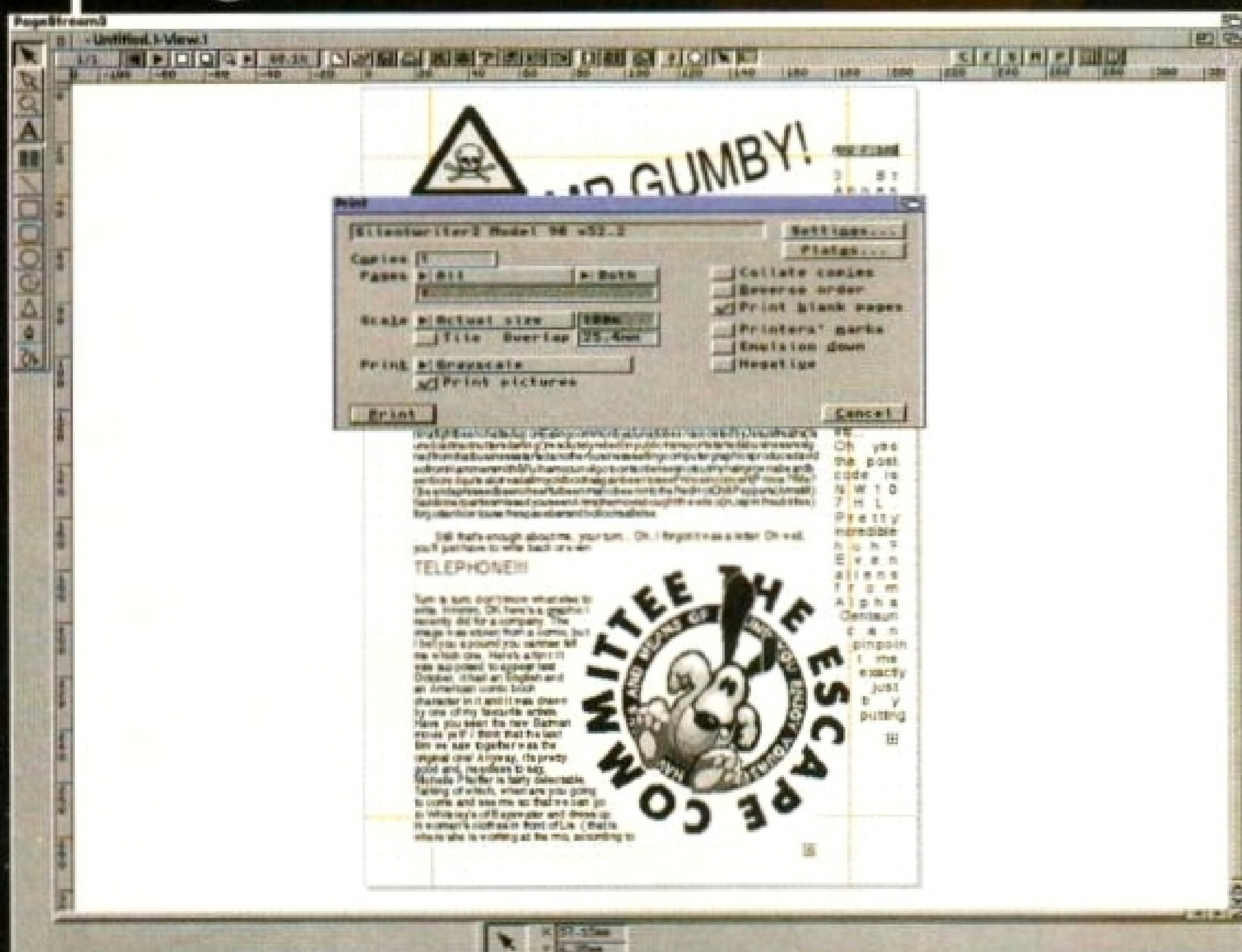
Lightwave 5

Newtek have left the Amiga somewhat behind on their development schedule, but we are assured that the new version of Lightwave will be out some time early in the new year. New features include a much-improved modeller, but will the PC's OpenGL-based interface be replicated on the Amiga through CyberGL or Mesa?

StormC and Art Effect 2

Haage and Partner aren't resting on their laurels with the accolades received for *Art Effect* and their C compiler – they are busy at work on new versions of their two most popular programs which will be out real soon. *Art Effect 2*, already nearing completion, is going to get even closer to its inspiration – *Photoshop*. The new version will offer faster screen updates and *Photoshop*-like layers. The new version of Storm C will give much faster compilation times, the package's one downfall according to our reviews, and more importantly cross-compilation facilities for the PowerPC. The move to a new processor starts here.

PageStream 3.2



Although not quite finished when it was originally released in version 3, *PageStream* is developing into the best DTP package ever on the Amiga.

PageStream 3 has been going through so many tiny and gradual changes over the past couple of years people still using version 2 won't recognise it now. At the moment you can upgrade to PageStream 3.2 on a time-limited beta basis, but the full release is only a few months away. Soft Logik are now also producing a version for the Macintosh which can only mean that Amiga owners will get the benefit from their widened horizons.

Draw Studio

Graham and Andy Dean are probably best-known for their seminal Shareware graphics program *Art Studio*, but they will be better known in the future for their great new structured graphics program *Draw Studio*. This program is still in beta as I write this, but should be available by the new year. *Draw Studio* is based around MUI and uses all of MUI's tricks and techniques to create a user-friendly and intuitive front-end that surpasses anything we have seen on the Amiga before.

Personal Paint 7

Cloanto's paint package is probably the one most-used on the Amiga these days, but that doesn't mean that development has ceased, unlike another program with 'Paint' in the title. Still *PPaint 7* gets so much better with each revision it's hard to know where they will go from here. The latest version offers pop-up menus instead of cycle gadgets, but more importantly it also gives the user over 180 ARexx commands and macros, tools for creating antialiased text (and warping it), new stuff for web page designers like importing and exporting GIF anims, making web image maps, and, of course, the transparent GIFs that *PPaint* has supported since version 6. It can also now save out NewIcons icons for pictures and brushes and create, edit and save animbrushes.

Cinema4D 3

HiSoft's English version of the popular German raytracing software has enjoyed favourable coverage in all the magazines and the new version looks set to repeat version 2's success with even faster render times. But that's not all the new features; you will also get to use visible lights (for spotlights and so on), lens flares and soft light cones for authentic torch beams. Inverse Kinematics has also been improved with joint limiting so that your models don't end up being able to kick their legs through their bodies.

Cybervision 3D

German hardware masters Phase 5 have been promising this bad boy since the summer, but it looks like it should be generally available by the start of the new year. The new card promises great things such as Zorro II/III compatibility, an OpenGL-compatible graphics language called CyberGL and add-on features like a flicker fixer for A4000 owners and MPEG playback facilities.

Other rumoured products coming to this magazine soon:

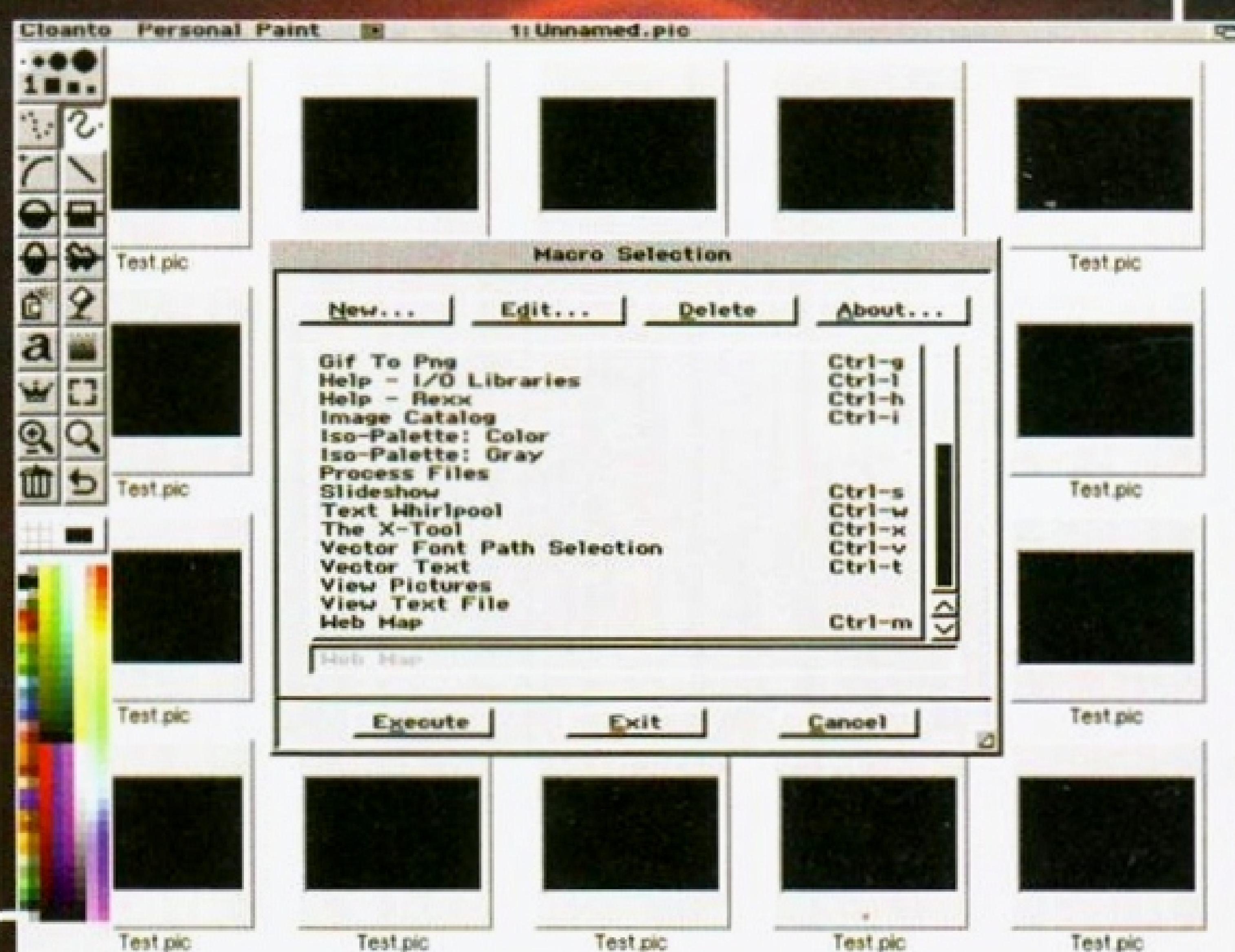
SoundPro from HiSoft

This is going to be the mother of all sound sampling software. Designed to work with pretty much any sampler on the market, *SoundPro* will be able to pull all sorts of funny tricks out of the proverbial sample hat.

AQCVid from Omnilink Corporation

Ever heard of QuickCam? It's a cheap little mono video camera shaped like a ball with a microphone built-in. The makers have sold thousands of them to PC owners wanting to do video conferencing on the cheap and Omnilink are doing an Amiga version of the software to work with it. The Amiga version will be compatible with both the QuickCam and Colour QuickCam and will create CDXL animations of you messing around in front of your computer. A brilliant idea!

Personal Paint has now inherited the mantle of *DPaint*, and the new version 7 has a tremendous list of new features and enhancements.



Cinema 4D 2

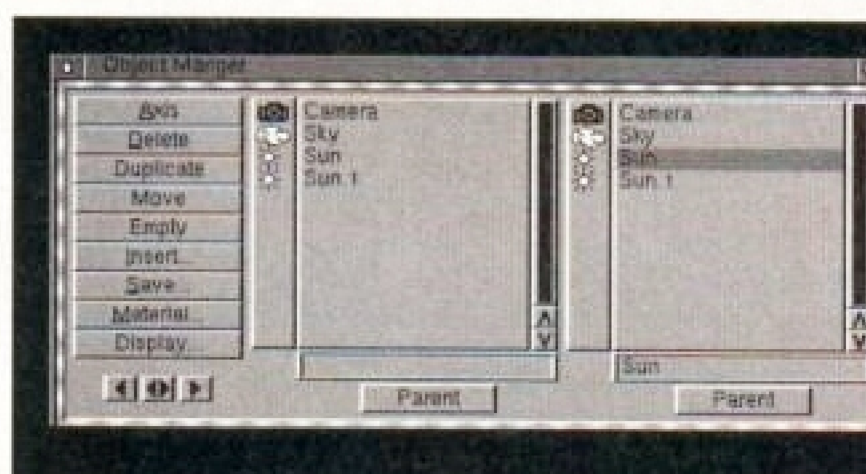
Cinema 4D 2 **is possibly the best combination of power, flexibility and ease-of-use that money can buy. You've got it all for free but don't take the program for granted. David Taylor, takes you through the essentials on p108 but here Graeme Sandiford shows you how to get the most out of the fantastic features and incredible interface.**

Before we begin, take some time to experiment with the program and its features. Try right-clicking on icons instead of left-clicking and holding down the shift key when selecting menus, especially ones that don't seem to have too many options.

Lets start with a brief tour of some of *C4D*'s key features. *C4D* has several modes of operation that enable you to perform a variety of functions. These can be accessed from a bank of icons located, by default, on the left of your screen. These can be used to (from left-to-right and top-to-bottom) change your view, edit an object's points, edit an object itself, edit an object's axis, edit a texture and edit a texture's axis.

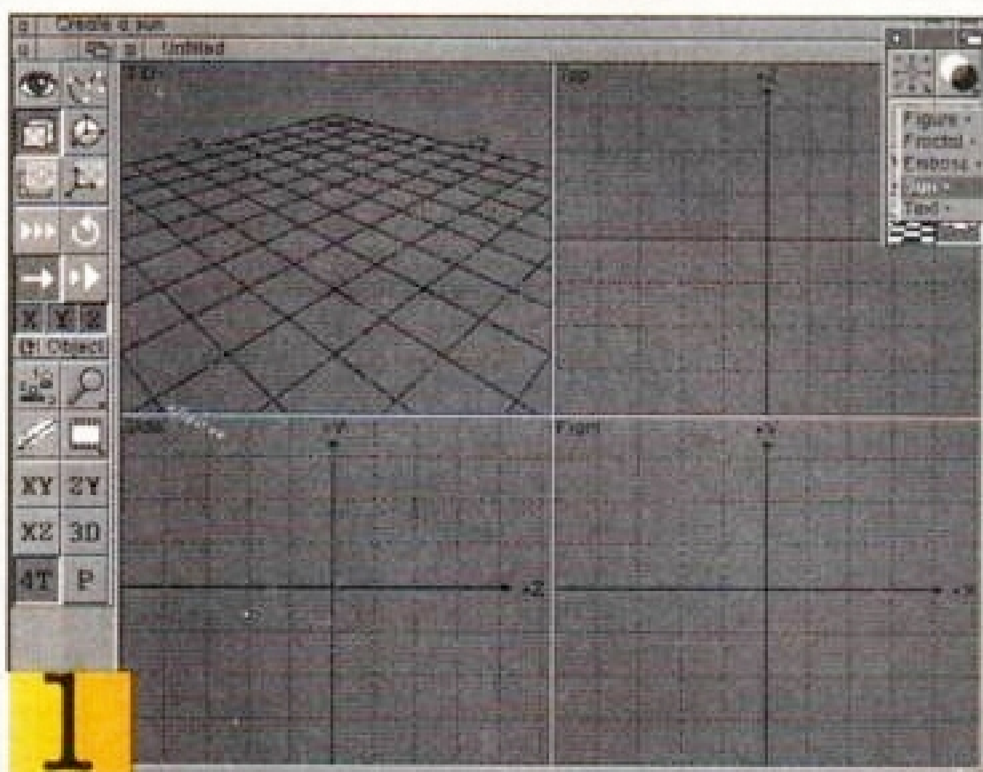
The remaining four icons before the row of XYZ determine the effect of your mouse movements. These include fairly normal functions like rotating and moving, as well as the more unusual drag function for use with *C4D*'s inverse kinematics system.

Once you are more familiar with the interface, you might want to begin customising it so it works the way you want. I would open the objects window (under the menu Windows/Object Bar), click on the 4T button to get a triview+perspective set of views and change a few settings in the Editor Preferences window. Other things you might want to change include the screen-mode, the default paths and your fonts.



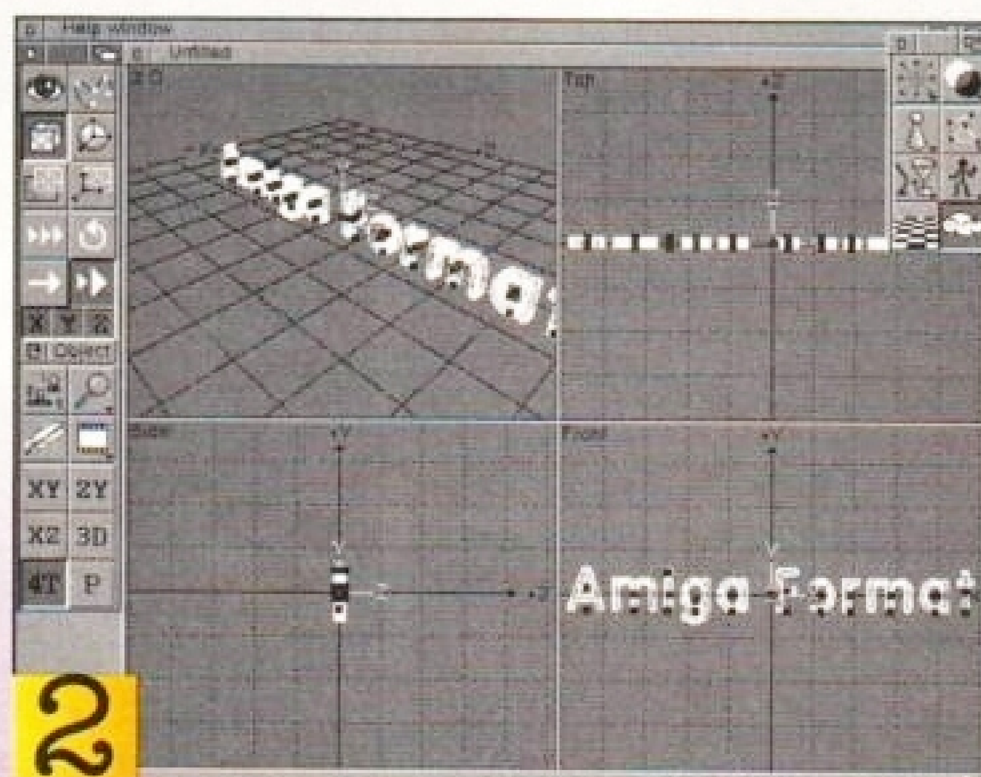
To give you control over all the objects in a scene, including the ground and sky, *C4D* uses the Object Manager. The easiest way of thinking of it is to relate it to a file manger like *DOpus* – you have two windows that can be used to copy and move objects to different hierarchies or levels. It can be especially important if you plan to create animations as this is how you group objects. It can also be used to assign materials.

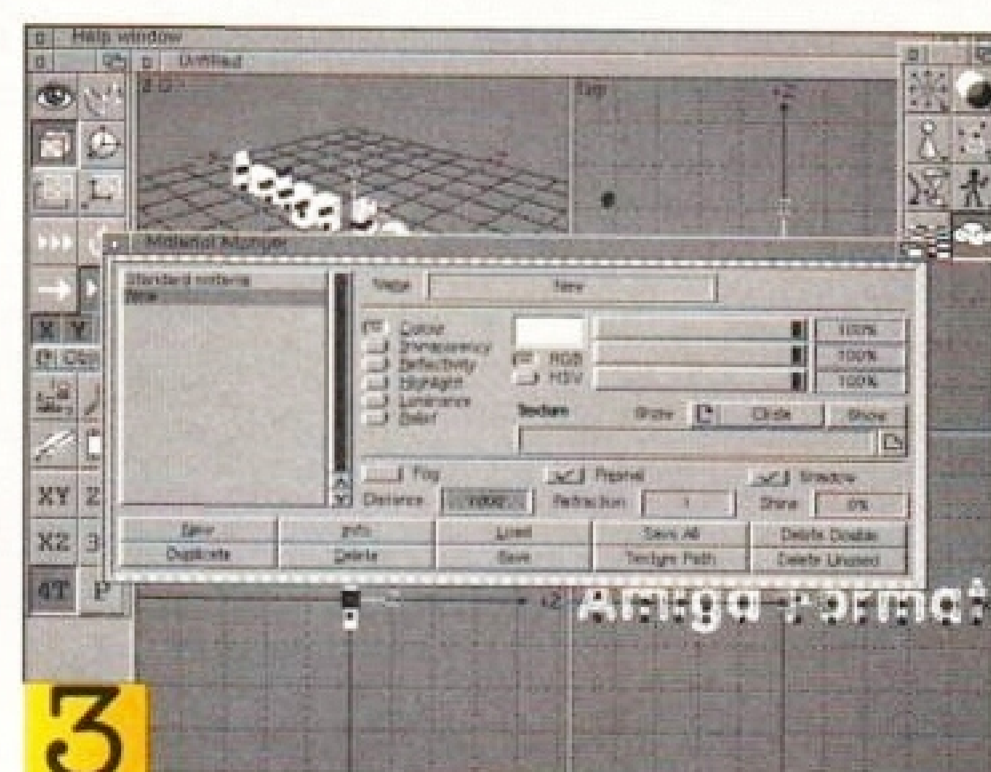
Creating a text logo



If you are using the floppy version of *C4D* you will need to substitute the text with a simple object. Right-click on the Special objects icon (the one with the man on it) and select Text.

Type your text into the top line and go to the file icon to the right of the Font gadget (not the File check box – that's for loading an ASCII file) and select the C4D/Fonts directory.



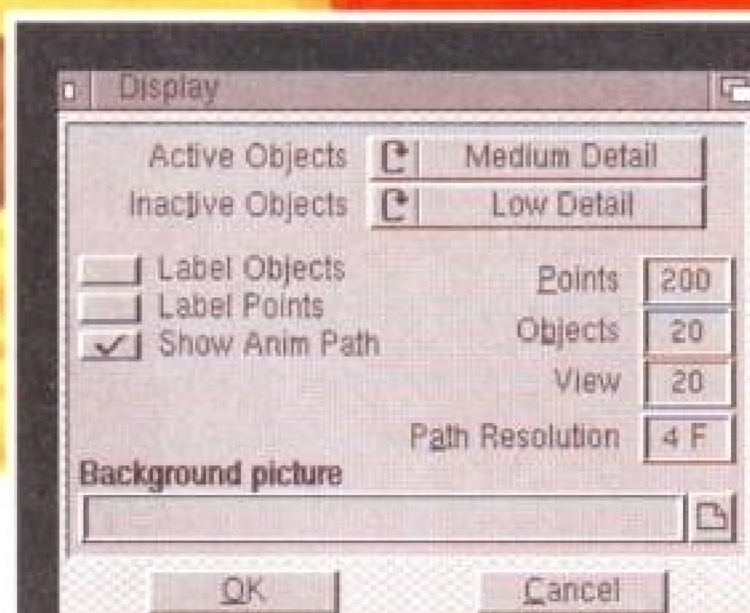


Click on OK. You should now have a 3D text logo. There's no need to extrude it, but you can make it thinner or thicker by clicking the X and Y bottoms off and using the scale mode.

Anyone for a game of chess? OK, hang on while I render the pieces.

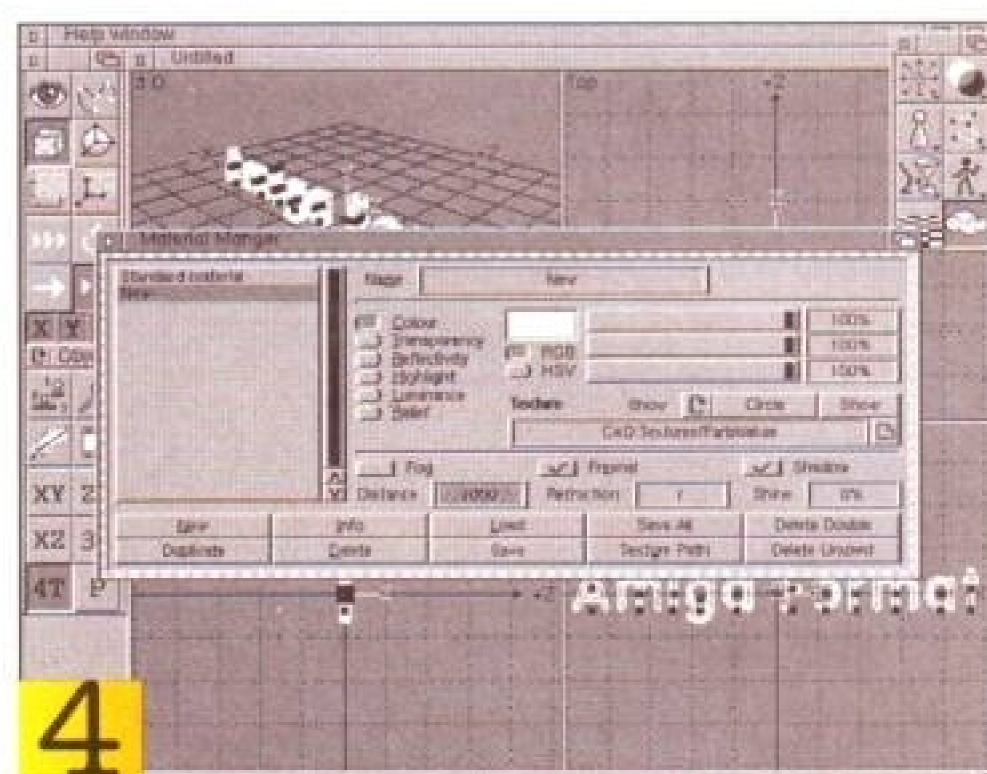
For installation instructions and a quick guide to the interface see page 108

"You can even adjust the sun which can also be animated to give the impression of normal daylight changes."



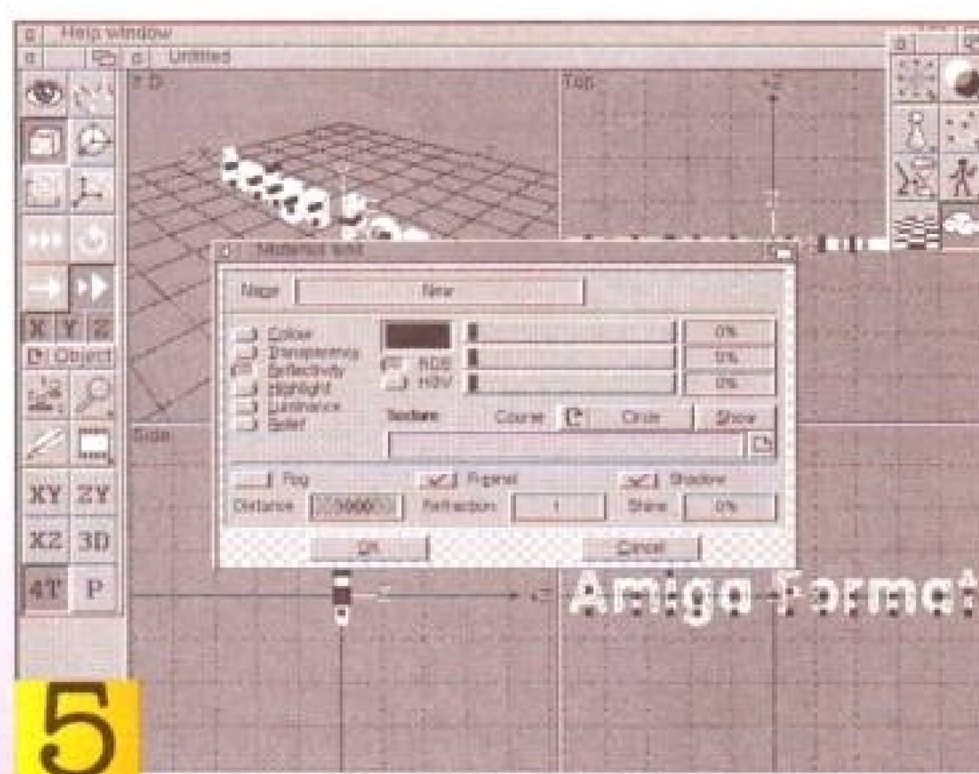
If you're working on a slow machine, 3D rendering and even editing can be a frustrating experience. *Cinema 4D* attempts to make things easier. The Display editor (the icon on the control panel with the sliders and numbers), can be used to determine how much detail of an object will be drawn on the screen.

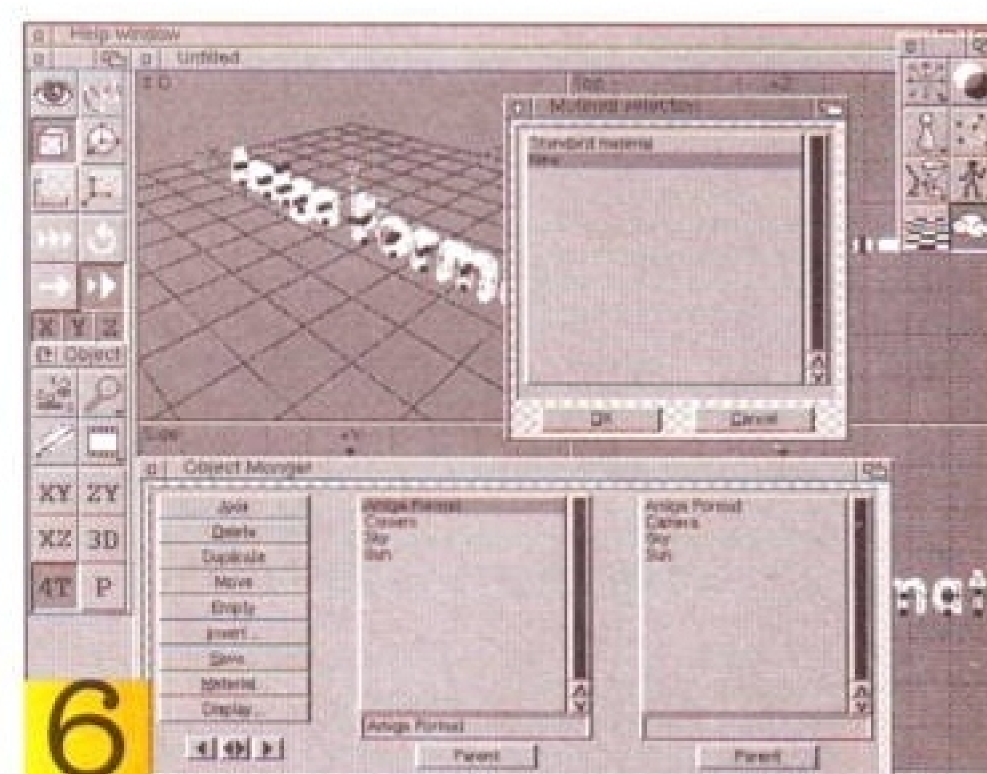
It can range from an exact image of the model in every detail, to just a few sketchy lines. To determine which, just cycle through the two gadgets at the top. If individual settings is selected you can change an object's setting from within the Object Manager. From this window you can also load a background picture and either label objects or even points.



Now we've got our main object we'll need to create a Material for it. Load the Material editor by selecting the menu Edit/Material Edit. Click on the New button as we'll be creating a new material.

Make sure the Colour button is selected and go to the file icon next to the text gadget and select the file C4D:Textures/Colourspot Select Show, have a good look and then close the window.





Open the Object Manager by selecting the menu Edit/Object Manager. Select your logo, click on the Material button and select your new material when asked assign the Material to sub-objects.

Continued overleaf ➡

Render your very own stairway to heaven.

SPECIAL OBJECTS

One of the great things about *C4D* is its groovy special objects. These are a collection of slightly unusual objects which can come in very handy at times.

*** THE EMBOSS OBJECT**
This is one that is especially interesting. It loads in image files and creates a new object with elevations taken from its grey-scale levels of intensity.

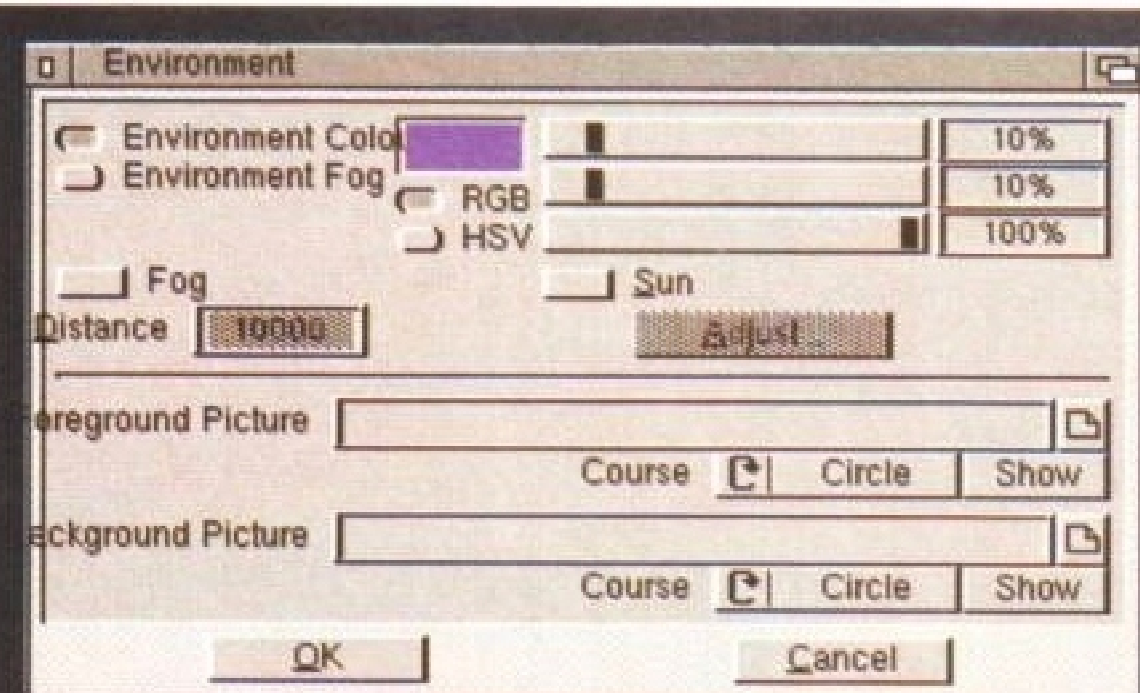
Unlike bump-mapping this actually creates a polygon object, be warned though, this can be a very memory and processor-intensive tool to use.

C4D also has a FRACTAL LANDSCAPE-GENERATOR which can be controlled by right-clicking on the special objects icon or selecting its menu with shift held down (this is the same with most of the specials).

*** THE FIGURE OBJECT**
This can be very useful indeed for anyone who's trying to create a character animation. It's essentially a ready-built, if basic, humanoid, with its hierarchies and inverse kinematics setup for animating.

To animate it correctly be sure to use the drag function when moving the body parts.

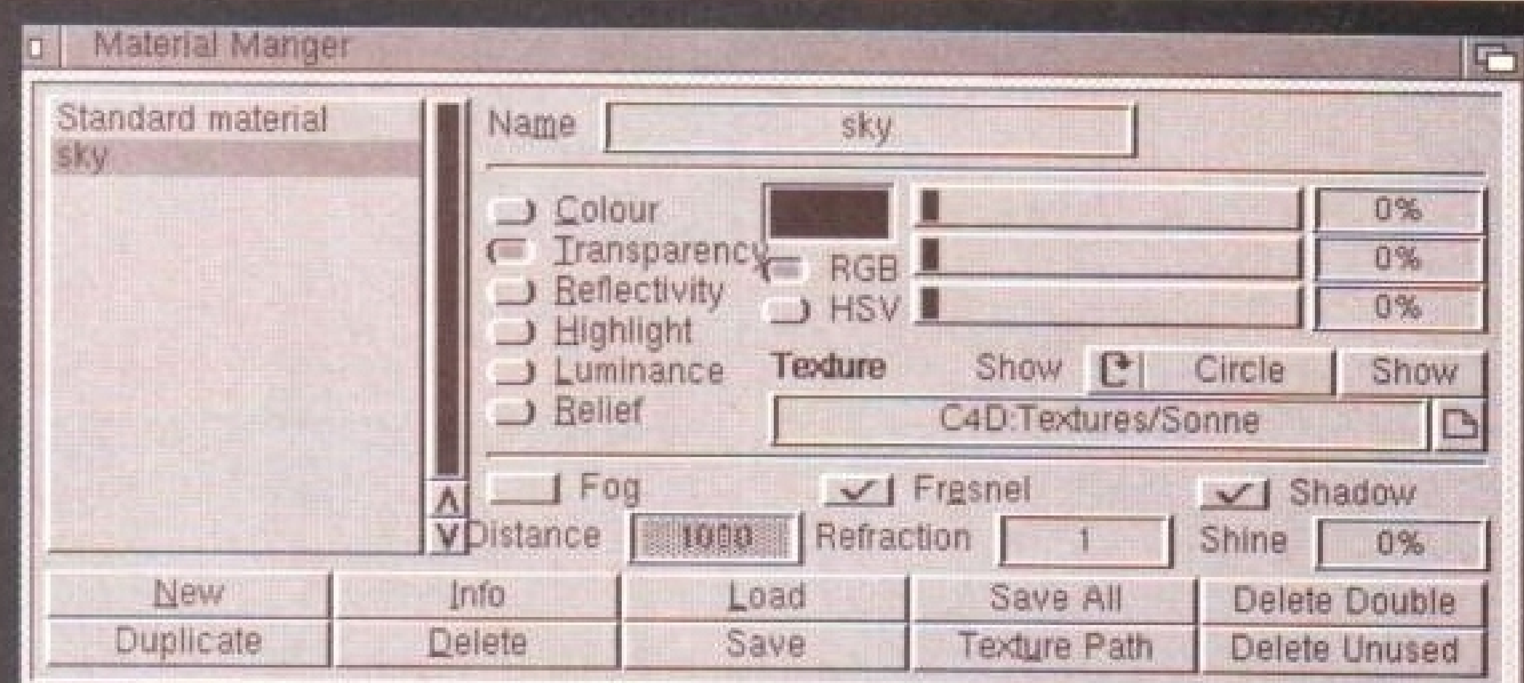
*** THE SUN OBJECT**
This special object is basically an infinite light-source. It can be positioned anywhere according to a time of day and latitude.



If you want to adjust the overall attributes of the scene you are going to render, one of the best places to start is the Environment editor. From here you can load in foreground and background pictures, change the overall colour and fog attributes and even adjust the sun (the main light-source) which can also be animated to give the impression of normal daylight changes.

"C4D has several modes of operation that enable you to perform a variety of functions."

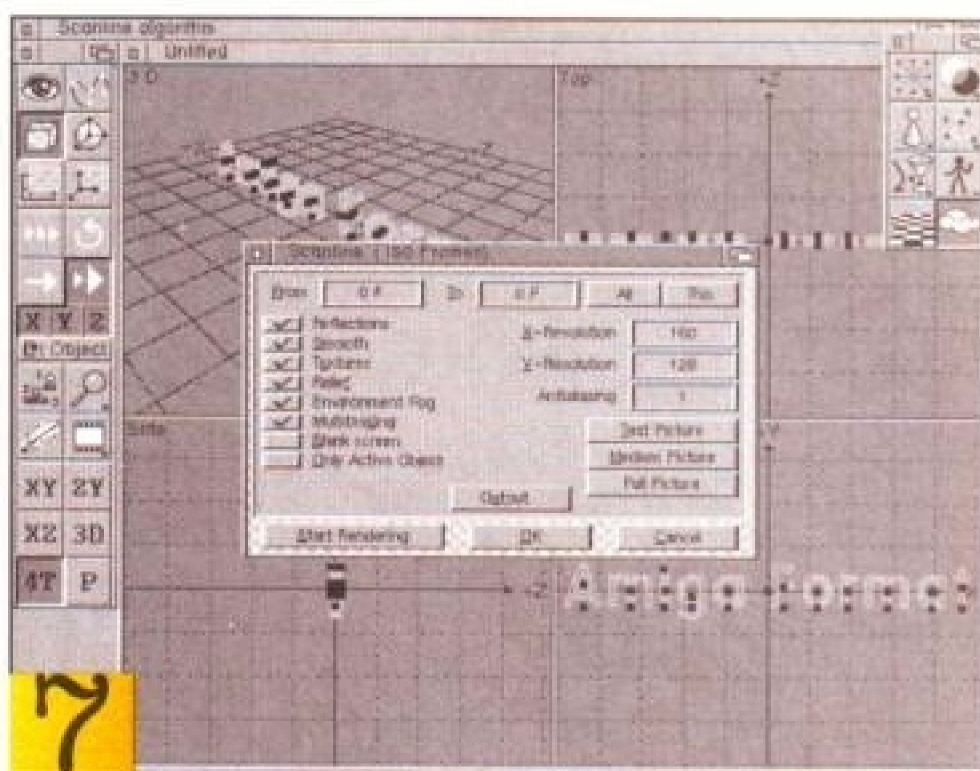




The Material editor is the place where you define the surface attributes of your objects, including the infinite ground plane and sky. The main options and mapping types are; colour transparency, reflectivity, highlight, luminance and relief which is for bump-mapping.

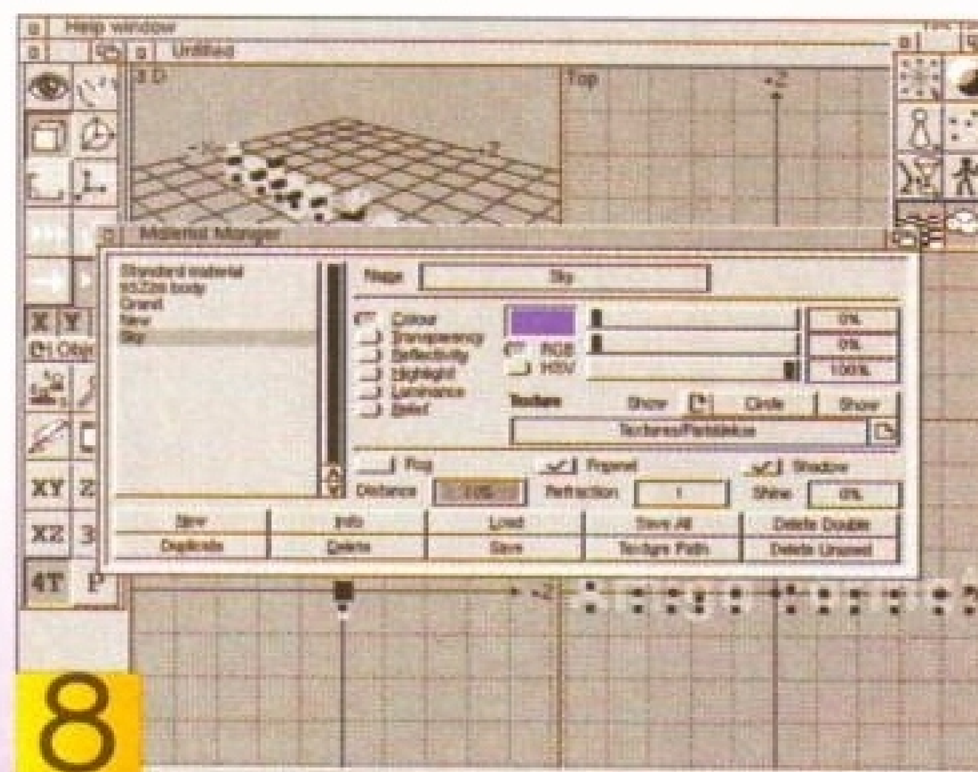
The great thing about *C4D*'s Material editor is that all of these options, except relief, can be controlled using the RGB settings which can produce some excellent effects and brilliant surfaces.

← Creating a text logo continued



Right-click on the Render icon and select Scanline. Click on the Medium Picture setting and then Start Rendering. Not what you were expecting? The tiny texture has been interpolated and looks quite different.

Now for a sky and ground. Click on the two bottom icons of the Objects window. Create a material for the sky making its colour 100% blue and reload the Colourspot texture.





Create a texture for the ground with a brownish colour and the texture Granite applied. Make it a shiny surface by setting reflectivity at 35% all-round. Apply the materials and render in raytrace. There you go!

CREATING A CHRISTMAS TREE

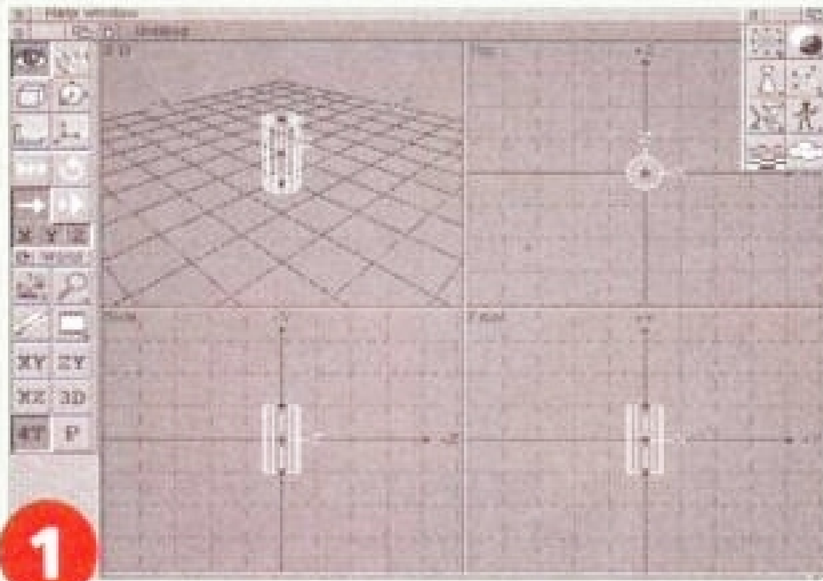
We're now going to create a fairly basic Christmas scene. It shouldn't take too long to complete and doesn't require too much modelling skill. The main purpose is to get you creating models, manipulating, moving, assigning textures and handling several objects in a scene.

We're going to create a Christmas tree complete with shiny bauble things. The techniques we will cover can also be used to create presents from cubes and a host of other Christmas things.

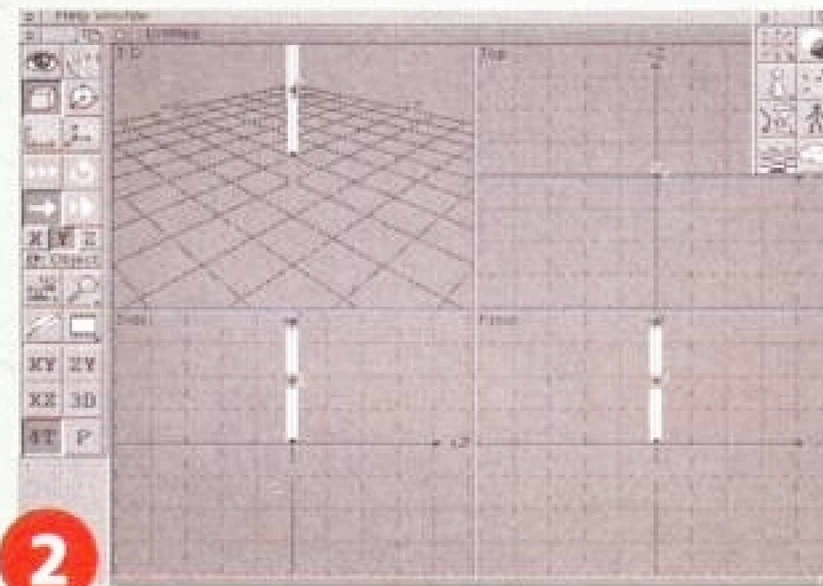
Bumper Christmas Giveaway

Eyetech have kindly given us three of their external CD solutions. The only thing not included is the CD-ROM drive but you do get everything else including the case, cables, power supply and software. Send a postcard with your name, address and telephone number to the following address:

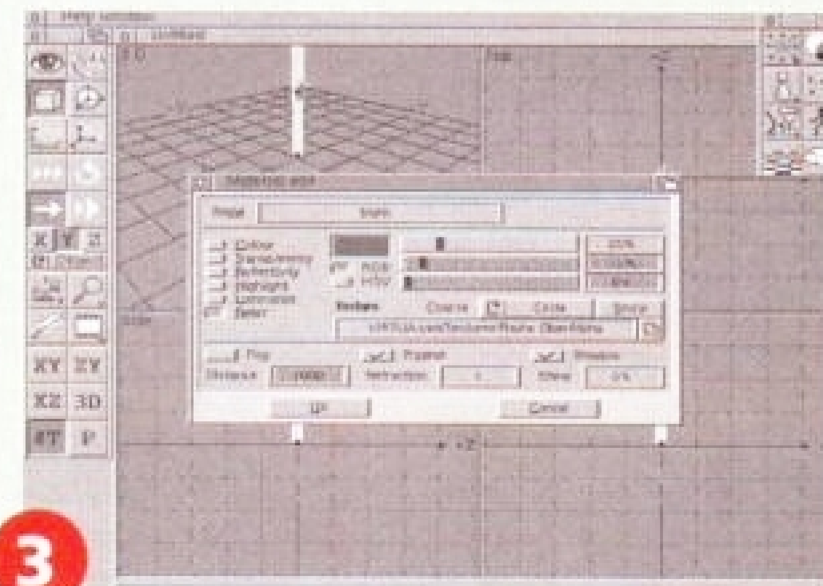
Eyetech • Eyetech Group
AF Christmas Compo
The Old Bank • 12 West Green
Stokesley • North Yorks • TS9 5BB



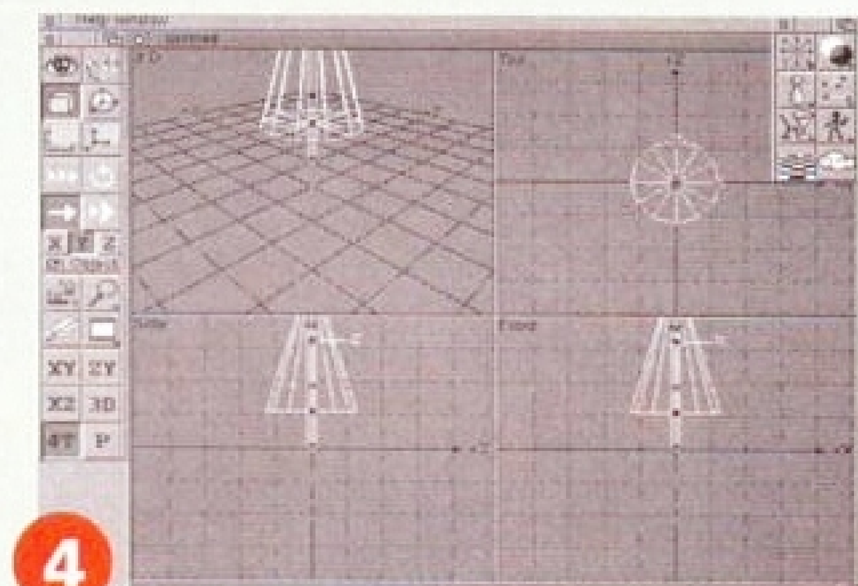
1 Click on the 4T button to open a four-windowed view. Create a cylinder by clicking on the Object window or selecting the menu Objects/Primitives /Cylinder. This creates a sealed cylinder.



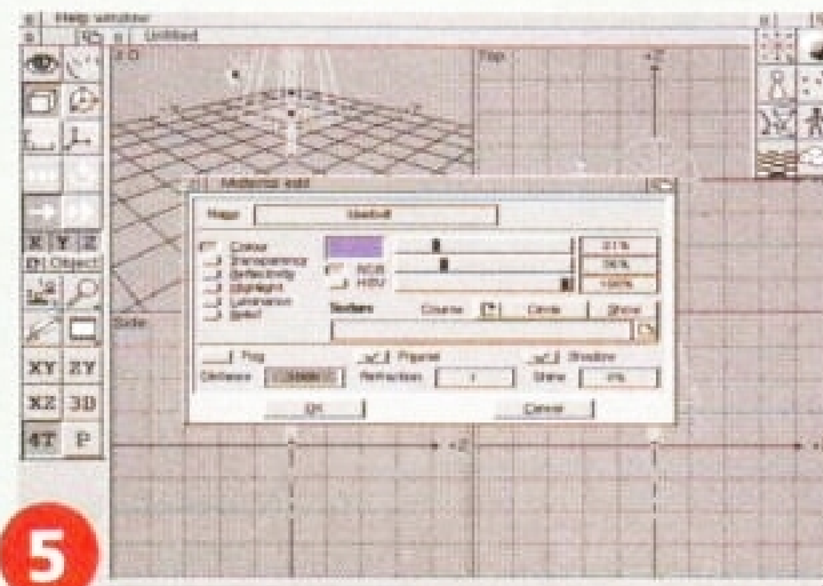
2 Select the Edit object icon, turn off the X and Z axis, by clicking the icons on the tool bar, and make the cylinder longer by scaling it. Turn off the Y axis, turn the others on and make it thinner.



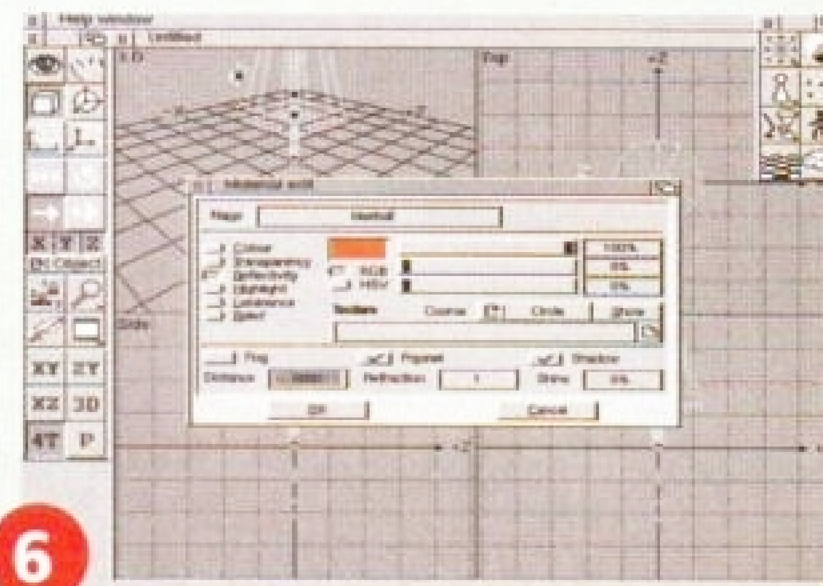
3 Select the menu Edit/Material Edit and click on Yes to create a new material. Make the colour a dark brown and then click on the relief button, load the texture Rough-surface and close the window.



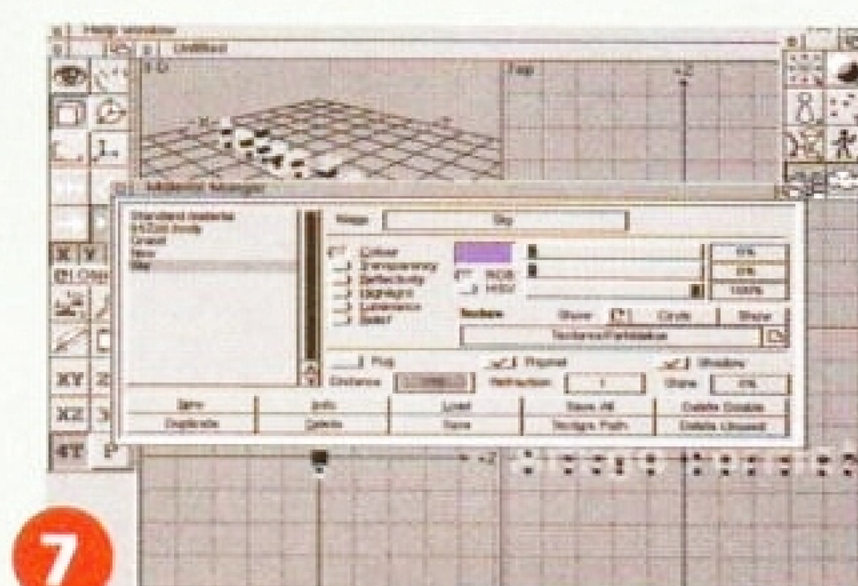
4 Create a cone to serve as the foliage of our tree. It's very basic, but this is just an exercise to acquaint you with *C4D*. Create a new material, as we did with the trunk, and make it green.



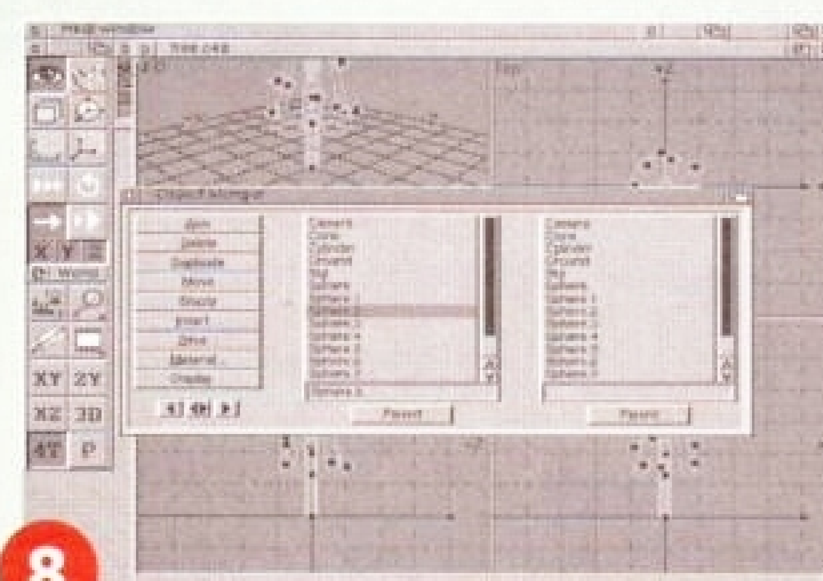
5 Now for some baubles. Draw a sphere, scale it down if necessary and select the Material Edit menu again. Create a material with the colour values in the grab and an equal reflectivity of 60%.



6 This will make your baubles shiny and light blue, but you can experiment with un-even reflectivity RGB values so that more of a certain colour is reflected. This can produce "interesting" results.



7 Copy your bauble and paste it a few times, spreading the copies around the surface of the tree. Go to the Material Manager and create some variations on the ball material by duplicating it.



8 Open the Object Manager and apply the new materials to the balls randomly by selecting the spheres and clicking on the Material button and selecting one from the list of defined materials.



9 Select the Sky and Ground options. Create materials for them and apply them and render in Raytrace. A couple of suggestions would be to apply the Mahogany texture to the ground and Colourspot to the sky.

Cinema 4D Offer

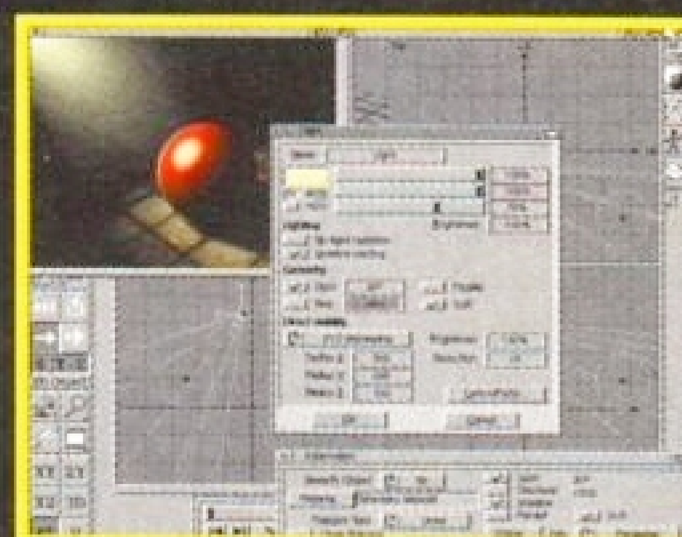
Got the Coverdisk – get the extensive user manual plus lots of example objects plus the optimised 68020/FPU version of Cinema 4D plus the complete version of Magic Link (allowing the import/export of many file formats including Lightwave, Imagine and Real 3D) plus full technical support from HiSoft, all for only £79.95. Alternatively you can upgrade directly from the Coverdisk to the brand new version 3 of Cinema 4D for just £149.95.

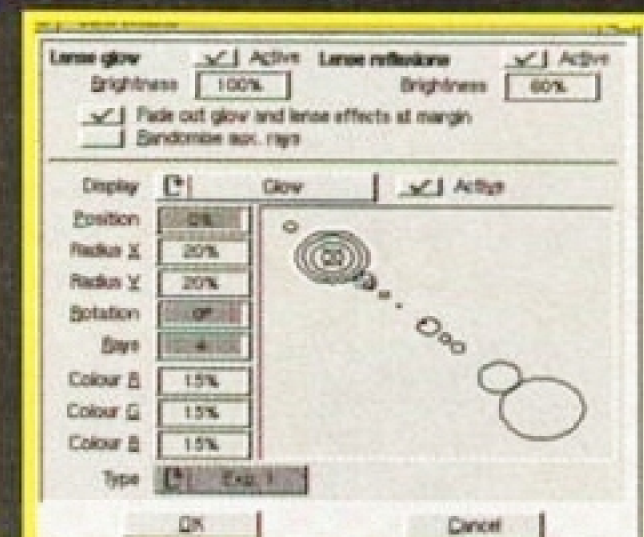
Extra new modules for Cinema 4D:

- CinemaWorld – allows you to create landscapes, mountains, oceans, reefs, worlds and sub-worlds, all within Cinema 4D. £39.95 disk.
- CinemaFont – use Type 1 fonts within your Cinema4D scenes, either as splines or as objects. Comes with the Bitstream 500-font CD-ROM (contains Type 1 and Truetype fonts) while stocks last. £39.95 disk.

VERSION 3 FEATURES:

- Faster render times and improved editing speed making it even easier to create your 3D masterpiece.
- The addition of Visible Light allows you to create fireballs, jet engines, real spotlights, floodlights and more.
- The new Lens Flares and Lens Glows are highly customisable (change their colour, reflectivity, position and radii; randomise and fade flares) and this lets you build some great effects such as highlights, glints, lasers and many other real-life camera lens characteristics.
- Soft light cones.
- Inverse Kinematics now supports joint limitation for the creation of real-world character animation.
- Enhanced raytrace dialogs with even more options.





To order, call free on **0500 223 660** armed with your credit card (Mastercard, Visa, Switch, Connect, American Express) quoting reference AFC431ZA. Or complete the order form and send a cheque or postal order to: **HiSoft Systems, The Old School, Greenfield, Bedford MK45 5DE**

All prices include UK VAT and postage within the UK; add £6 for guaranteed next day delivery. Offers only available to *Amiga Format* readers and are strictly limited – all offers will close 28 February 1997.

Free gift with all orders: Maxon Magic (worth £29.95) plus entry into a draw to win an SMD-100 VideoCD decoder with CD-ROM drive – perfect for home cinema!

Order Form

Please send me the following:

Please note: Offer closes February 28.

68020/FPU version with manual and objects	❑	£79.95
Version 3 Cinema 4D	❑	£149.95
CinemaWorld module	❑	£39.95
CinemaFont module	❑	£39.95
Guaranteed next day delivery	❑	£6
TOTAL		**£**

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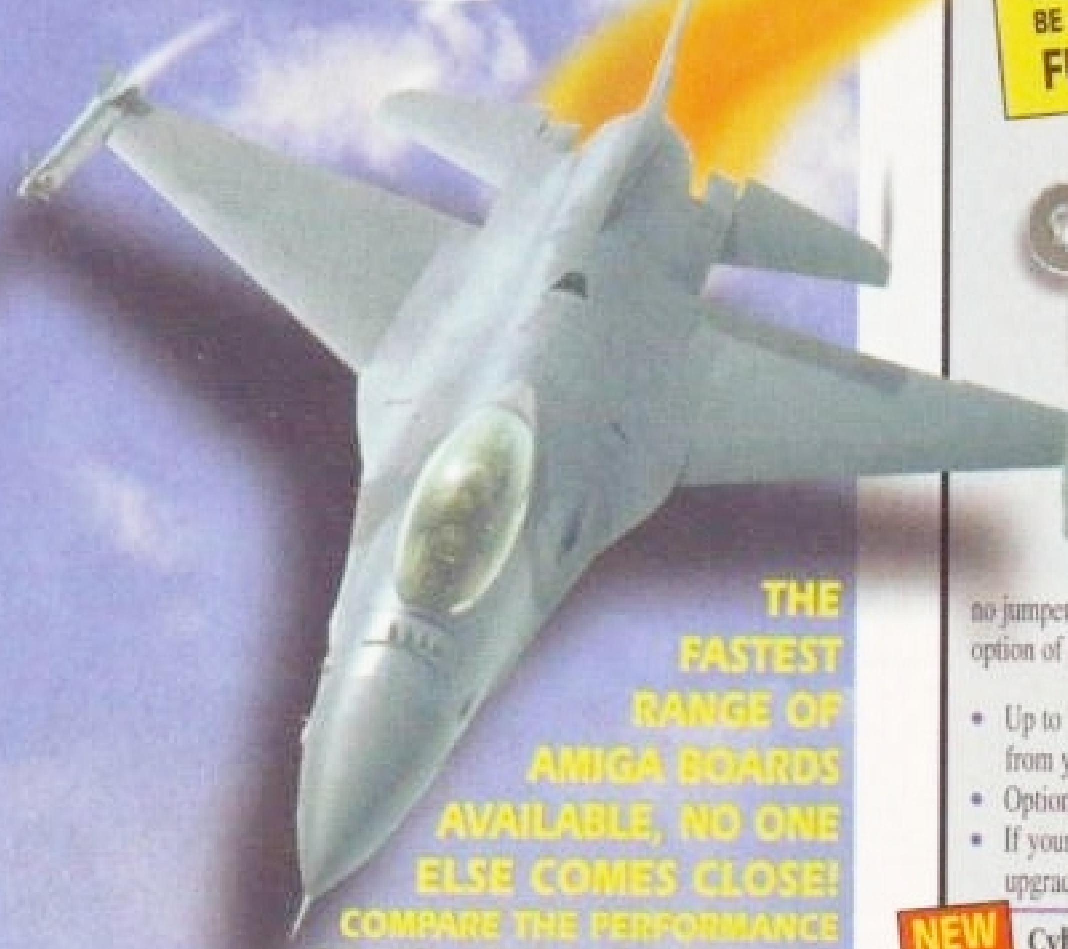
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(payable to HiSoft Systems Sterling cheques on a UK A/C Only)

2. ❑ **Postal Order**

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CYBERSTORM II

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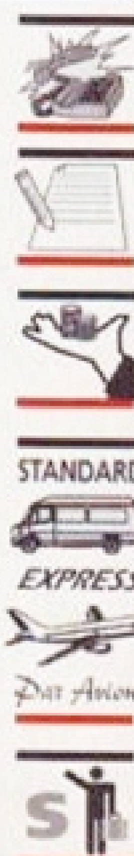
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Emulators Part 4

ATARI EMULATORS

Similar in many ways to the Amiga, Simon Goodwin tests emulation of Atari computers.



The 16-bit 520ST, launched in 1985, was cobbled together by Atari using off-the-shelf parts.

This month we look at emulators for computers made by Commodore's great rival, Atari. Atari made two home computer ranges – the 8-bit X00s, based on the 6502 processor and introduced in the late 1970s, and the 16-bit STs, based like the Amiga on Motorola's 68000 and launched in 1985. Rather surprisingly, ST emulation is more useful on old Amigas than 8-bit Atari emulators on any system. I shall discuss the emulated systems in chronological order, but don't give up if you've only got an A500 – you'll get your turn!

CUSTOM HARDWARE

The Atari 800 has three main custom chips, with very similar functions to their Amiga counterparts. Just like the Amiga, the Atari 800 has a screen co-processor which allows changes in display modes and palette settings from one line to the next. The 8-bit processor runs at 1.79MHz – exactly a quarter of the original Amiga's clock speed.

There are some important differences. The 8-bit Atari has no blitter to copy and convert graphics, but it does support text-based displays, where each byte in memory controls a whole character on the screen. Emulation of this is tough, even with blitter assistance.

Lots of bytes must be manipulated for each one changed in Atari memory. Worse still, alterations to the Atari text font instantly update every corresponding character on the computer screen. Each font byte could affect hundreds of bytes on the emulated display.

Atari sound is based on mono four-channel square wave synthesis. I've yet to find an Atari emulator that simulates this on the Amiga, although it should be possible. As you may guess by now, Atari emulation is a tough nut to crack.

ATARI 400

Atari's first home computers were the Atari 400 and Atari 800. The Atari 400 was a cut-down version with limited RAM. Later 'XL' and 'XE' models had GTIA and increased ROM and RAM capacity, but essentially the same internals. There was also a keyboard-less 5200 model for games players.

Atari peripherals daisy-chain together using a slow serial interface, copied by the VIC-20 and C64. Five and a quarter inch floppy drives were optional, with DOS loaded from disk.

The original 810 model was bulky, erratic and glacially slow, with a capacity of around 100K on 40 single-density tracks. Later XL models used a double-density format.

ATARI HISTORY

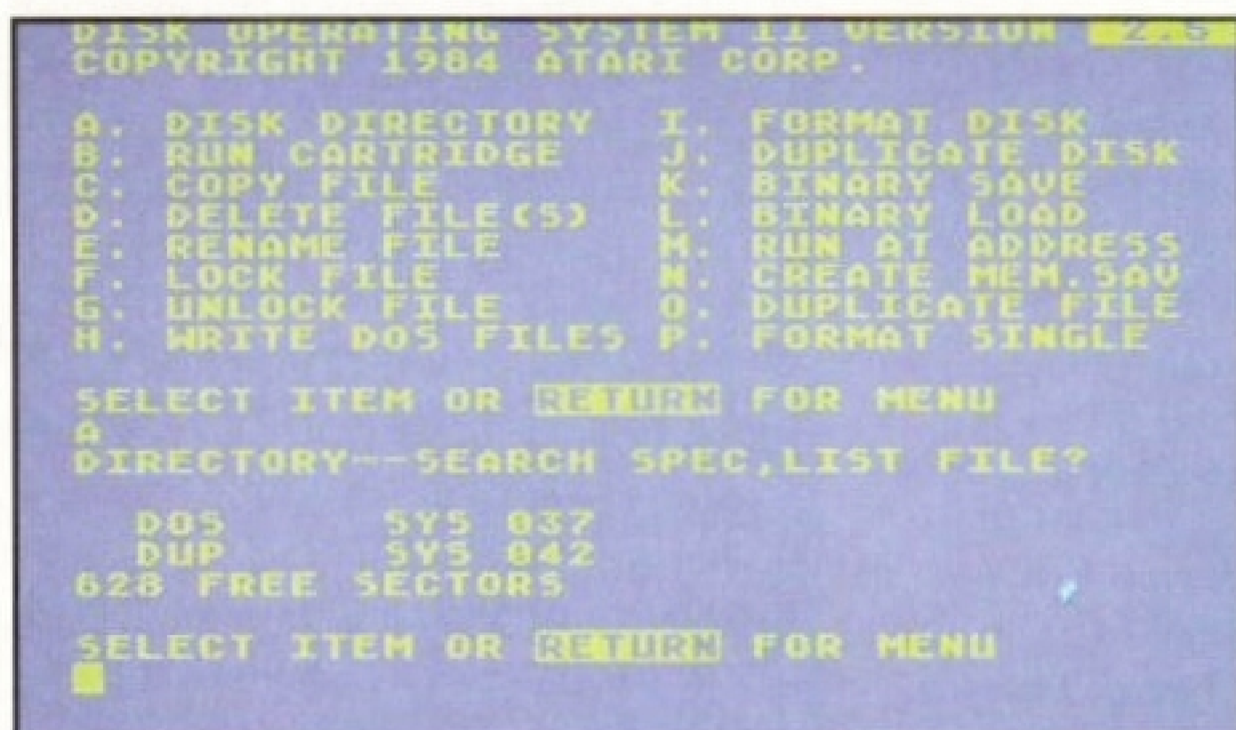
Atari was founded by video game pioneer Nolan Bushnell, who cleverly sold out to movie giants Warner Brothers before the 8-bit bubble burst. The name comes from the Japanese board-game 'Go', where it means 'beware'. Atari made arcade machines and games consoles as well as computers, but this article concentrates on the home micros.

The 8-bit Ataris are the spiritual ancestors of the Amiga. The Amiga project was started by Atari engineers, but Commodore took it over when Atari ran out of money to fund further development. This left Atari without a 16-bit computer, so in 1985 they cobbled together the Atari ST from off-the-shelf parts.

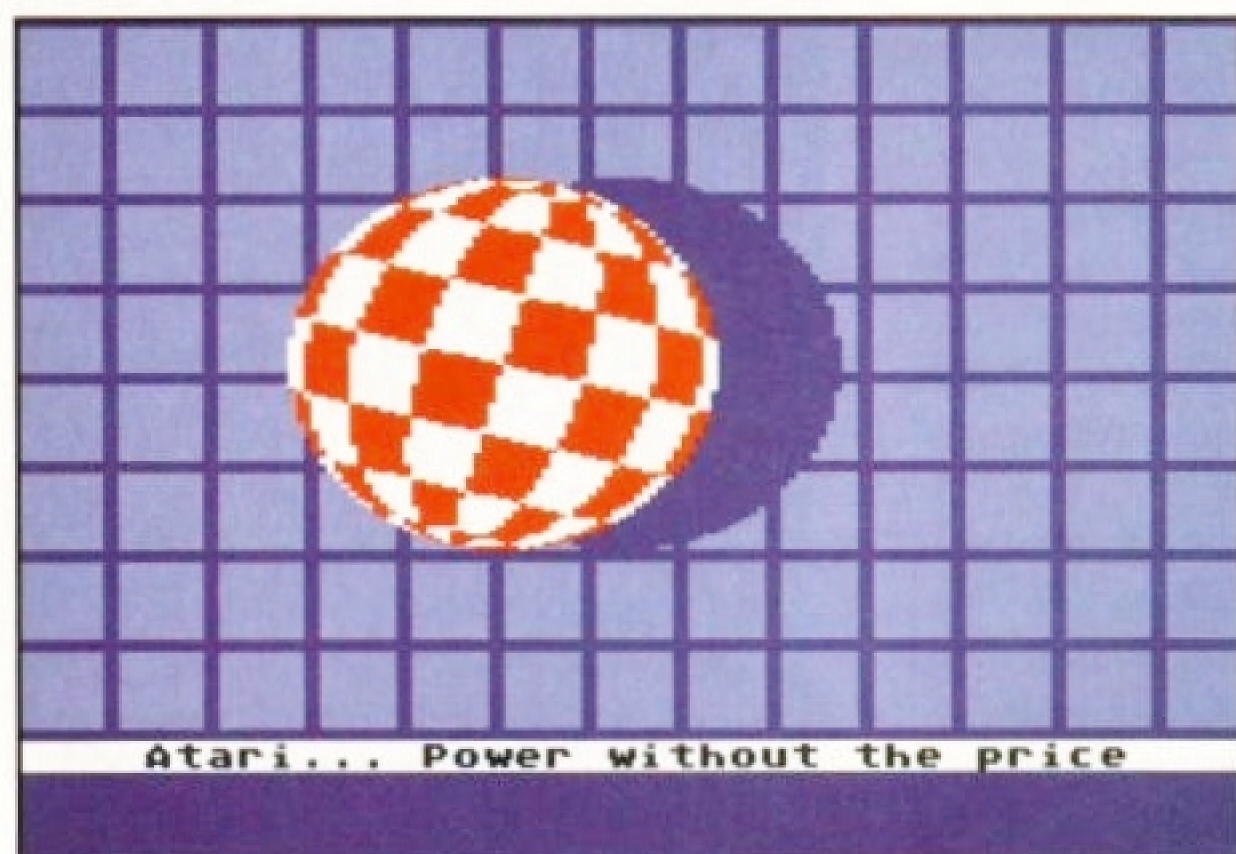
Ironically, a year earlier the ailing company had been taken over by Jack Tramiel, former boss of arch-rivals Commodore, who had been kicked out of the company he founded. He took the helm at Atari when Warner Brothers decided to get out of the market.

The Amiga hardware development team learnt their trade making Atari custom chips. The Amiga has more in common with early Atari systems than with any other computer.

The Atari project was known as 'Colleen', whereas the Amiga was called 'Lorraine'. These names were apparently chosen to confuse eavesdroppers into thinking that the inventors were discussing romantic rather than electronic efforts...



This DOS menu will be very familiar to Atari 800 disk users.



Deja vu? The Atari 800 version of the *Amiga Boing* demo!



Palette stripes and Lo-Res sprites (above) are hallmarks of the early Atari game *Amphibian.*



Fast display hardware made the Atari 800 ideal for games with a big, scrolling playfield.

ATARI GAMES

For many years Atari games were world leaders, combining playability, good graphics and technical excellence. It boasted excellent versions of arcade titles like *Galaxians, Pacman, Defender, Donkey Kong, Millipede, Qix,* and many original games. *Star Raiders* and *Miner 49er* inspired later UK hits like *Elite* and *Manic Miner.*

By modern standards the display resolution is low and the sound buzzy, but in its day the Atari 800 was almost as far ahead of its rivals as the Amiga was, seven years later.

AMIGA EMULATORS

There are two viable ways to emulate an 8-bit Atari on the Amiga. Both require a very fast computer – at least a 68040, with a 68060 much preferred. In the absence of disk or cassette transfer software you need to transfer files from a real Atari with a rare 850 serial interface, or download them from the Internet, where they're in plentiful supply.

Atari 800 is the only 8-bit Atari emulator that runs under the Amiga's operating system. It emulates the original Atari 400 and 800, the 800XL and Atari 5200 console. The program is freely distributable, with source entirely written in C. It was originally developed by David Firth for Unix workstations and converted for Amigas by his brother Stephen.

The conversion has some nice features, like Amiga menu menus and Gadtools control of start-up options, but it's only at version 0.6 and some features – like help and sound – are not yet implemented. The use of compiled C code makes it slow compared with other 6502 emulators written in assembler.

Speed could be substantially improved by re-coding. The complexity of the Atari hardware means it will inevitably require a fast Amiga, but there's a lot of scope for optimisation given that the Atari comes much closer to the Amiga than it does to the X-Windows way of doing things.

Atari 800 requires Workbench 2, and prefers Workbench 3 with AGA. Atari screens can show up to 128-colours, so palette effects soon use up the colours on old Amiga chip-sets. It runs as a task, and uses IXEMUL library (on the *AFCD*) which you can iconify to save CPU time. It requires 640K of fast memory for the task and library, and about 256K of chip RAM for its own AGA screen. It also works in a window on the Workbench, taking only half as much chip RAM but with inevitable colour restrictions. Most of the documentation is for the Unix version, but there's a useful AmigaGuide in the source archive. Before it will run you need the Atari ROMs in a sub-directory assigned to 'object:', as well as IXEMUL version 41 or later in LIBS:.

I don't want to be too critical of this emulator – it's system friendly, compatible and works well, although slowly. But until a hacker with real knowledge of Atari and Amiga hardware takes control of the source, it's just too slow to use.

That's a pity because the Atari 800 is a classic micro, very much in the spirit of the Amiga. But given the difficulty of emulating the Amiga on any other platform, the cost of Atari 800 emulation shouldn't be a great surprise.

ATARI ST

The Atari ST is much more easily emulated than the 8-bit models, because it used the same 68000 processor as the first Amigas, and had relatively little custom hardware.

Later models like the STe, TT and Falcon had extra hardware to bring them closer to the Amiga's specification, with more colours and 8-bit sampled sound. The TT and Falcon have 68030 processors but Atari went no further, so there's no support for the 68040 or 68060, even in late versions of the Atari operating system.

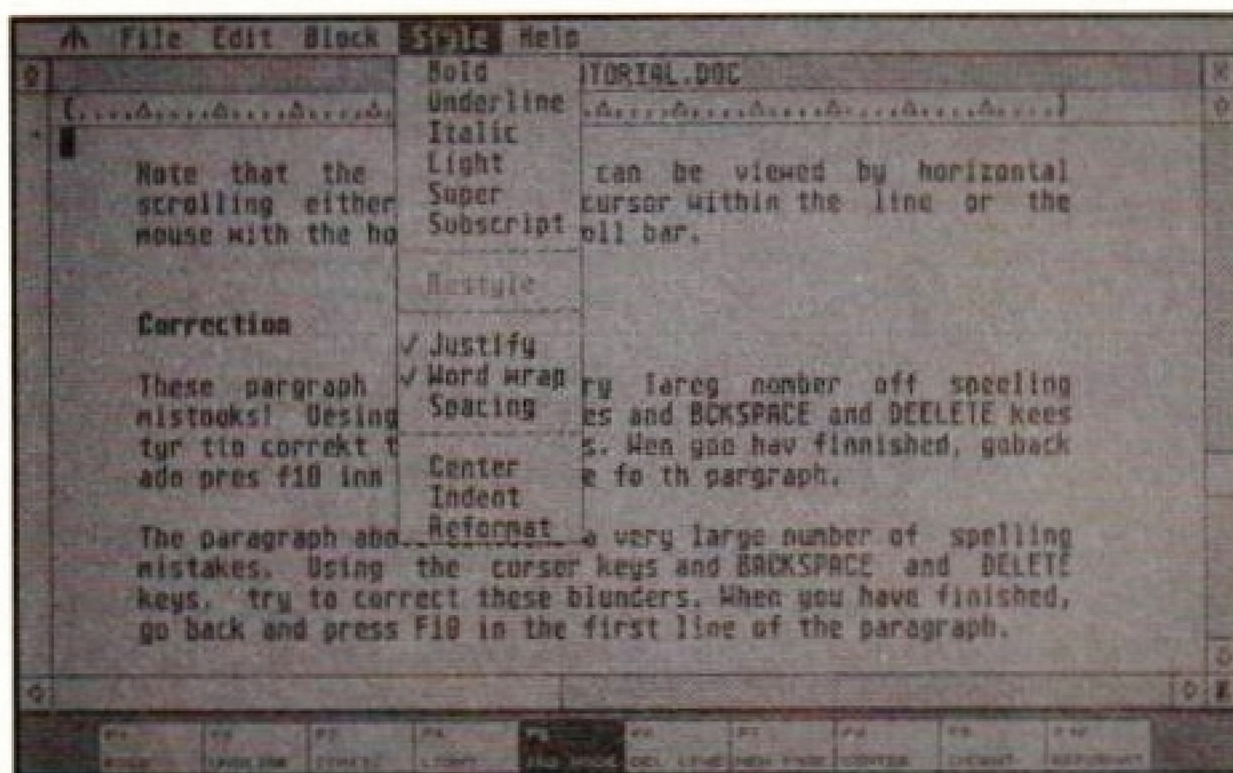
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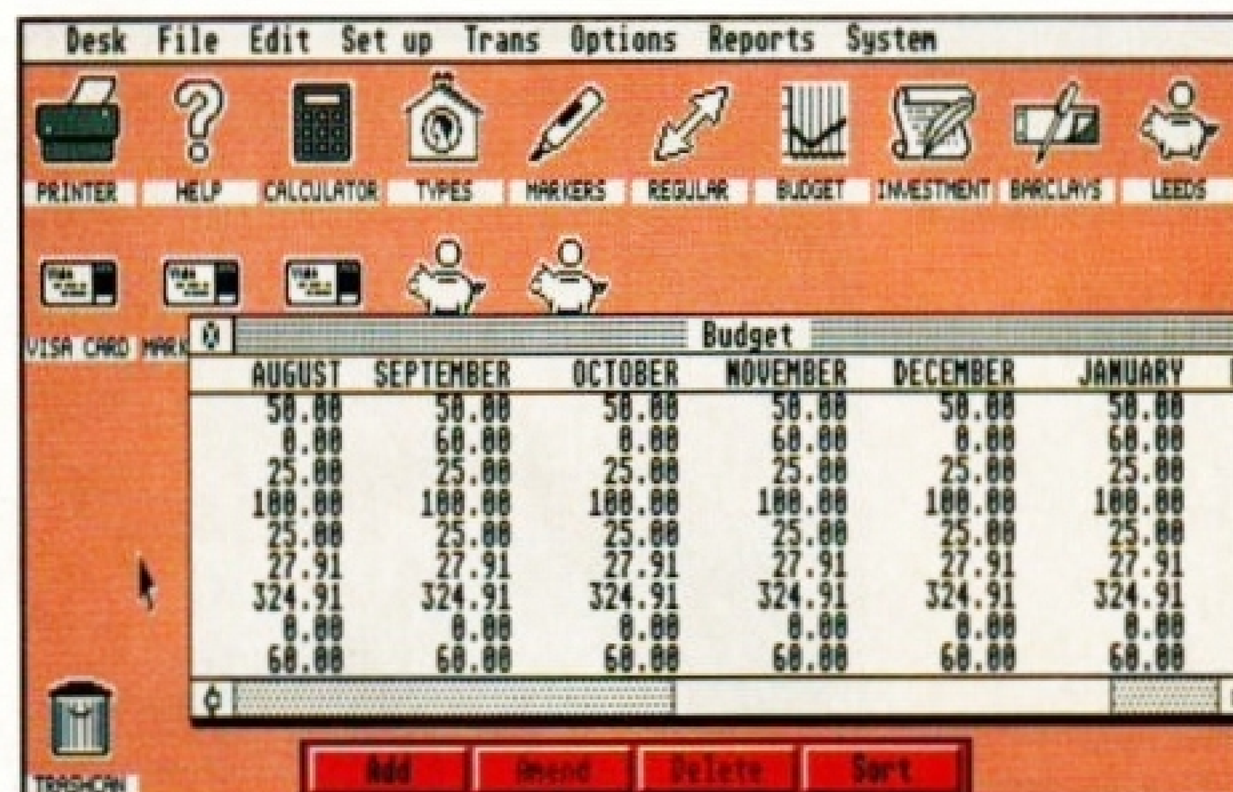
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First Word from GST came bundled with many ST systems.



***Home Accounts* is typical of 'productivity' software for GEM on the ST.**

This stops you running ST programs on the fastest Amigas. Even if the system was patched to make it 68040 aware, many programs would still crash because they don't expect the copyback cache.

ST emulators usually require you to obtain your own copy of the Atari ROM, known as TOS, for Tramiel Operating System. Much of the code came from seventies micro pioneers Digital Research, including a 16-bit version of CP/M and GEM (Graphics Environment Manager), a simple single-tasking windowing system.

Atari ST programs fall into two main categories – GEM applications, which use the operating system, and others – mainly games and demos – which hit the hardware directly. Current Amiga ST emulators only work with well-behaved GEM applications. This means very few ST games can be emulated, and clobbers packages that make direct access to the ST's built-in MIDI.

ST SOFTWARE

The strengths of the ST are in MIDI and Desktop Publishing. MIDI emulation is problematic because of hardware differences, but DTP packages like *Calamus* can out-perform Amiga equivalents on 68000 machines.

Most ST games were converted to the Amiga, so the lack of games emulation is not a great drawback. An Aminet utility, ST2Amiga, purports to help programmers convert code from the ST to the Amiga. It helps, but it's far from automatic, requiring detailed low-level knowledge of both systems.

ST EMULATORS

Atari ST emulators abound, but most of them are very similar, written for the original 7MHz 68000 Amiga. I've used two which include versions of TOS. The original 140K task had German menus, but an update on *Scope PD* disk 149 was a bit bigger and worked in English, mostly. Apart from that, they're very similar and incompatible with Workbench 2.

These tasks start by displaying a menu allowing you to pick the display mode from the three possibilities. Once chosen, there's no return to the Amiga, although you can reset by pressing both mouse buttons at once.

You need two floppy disk drives and at least a megabyte of memory for the emulation to start. Most GEM programs work, and you can read, write and format floppies, but disk and display handling have minor bugs; sometimes screen updates are incomplete and disk changes can cause confusion. Writing to floppies is slow.

Aminet's ST4Amiga comes with assembler source, a program to save the ST ROM, in Pascal and ST compiled code, and a short document which says "Q: What's the difference between ST and Amiga? A: About 14K". All versions that I've seen require a genuine copy of TOS 1.02 and lack support for MIDI and the ST serial port. ST4Amiga is compatible with Workbench 2 though, unlike older versions.

The most advanced and well-presented ST emulator is AmTari, on the *Emulators Unlimited* CD. This is a 1992 demo version, with no upgrade details, but impressive features.

AmTari requires Workbench 2 and a copy of Atari TOS – either version 1.6, or the improved 2.06 release – plus at least 1Mb of Amiga RAM, with 3Mb preferred. The full version comes on two disks with a printed manual.

Unlike the rest it multitasks with Amiga programs. You can determine the amount of memory and CPU time available to the emulator, and the Amiga then gets the rest. This neat little trick requires memory management, and AmTari expects the 68020 or 68030 MMU, as in Amiga 3000s, rather than the revised 68040 or 68060 hardware.

AmTari works with 720 and 1440K floppy disks as well as the original 360K single-sided format. The registered version supports hard disk via hard files, which are slower than Amiga partitions but allow dynamic extension.

CONCLUSION

ST emulators work best on old 68000-powered Amigas, although 68020 and 68030 are supported by AmTari as long as you've got memory management hardware. For the foreseeable future Atari 800 emulation is strictly for power users, with a 68040 or 68060 processor vital to run programs at useful speed.

This is one area of Amiga emulation where humble A1200 owners are caught between two stools. Next month I'll look at emulators for a range of micros, compatible with all Amigas. Meanwhile, there's a clear gap in the market for budding emulator authors with Atari expertise...

AutoRoute set the standard for UK road navigation software.

CROSS EMULATION

The other way to use Atari 800 software on the Amiga is by cross emulation, running the Apple Mac emulator 'Rainbow'. I tested it on Shapeshifter with a 40MHz Warp Engine 68040 and a Picasso 2 graphics card. It was still slower than the real thing but more usable than the Amiga emulator, not least because the keyboard responded immediately.

Like the Amiga version, menu options let you set the ratio of display to processor emulation speed. I got 50 per cent CPU speed at a rather feeble 3.5 screen updates per second. Even a top-flight Cyberstorm and CyberVision set-up struggles to run games at full speed, although it might come pretty close.

The demo version 1.3 of Rainbow runs in a small 320 x 192 pixel window on the 256-colour Mac desktop. The full version has sound and can enlarge the display, although that makes it even slower. At present it's a bit better than the Amiga version, but you still need a very powerful machine to do it justice.

There's a PC emulator for the Atari 800 too, but that's unusably slow on Amigas. As I've said before, the overhead of emulating one processor (Intel 8086) to emulate another (6502) is unbearably slow. But the PC Atari emulator Xformer is still worth getting, because it includes useful example files and is freely distributable up to version 2.5.



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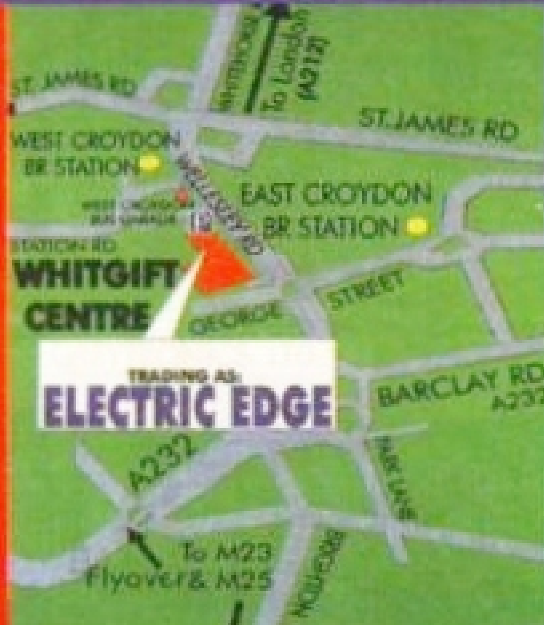
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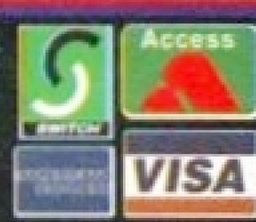
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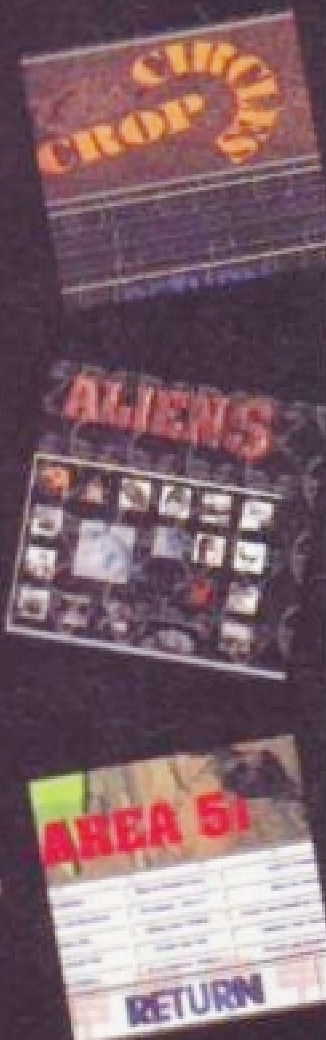


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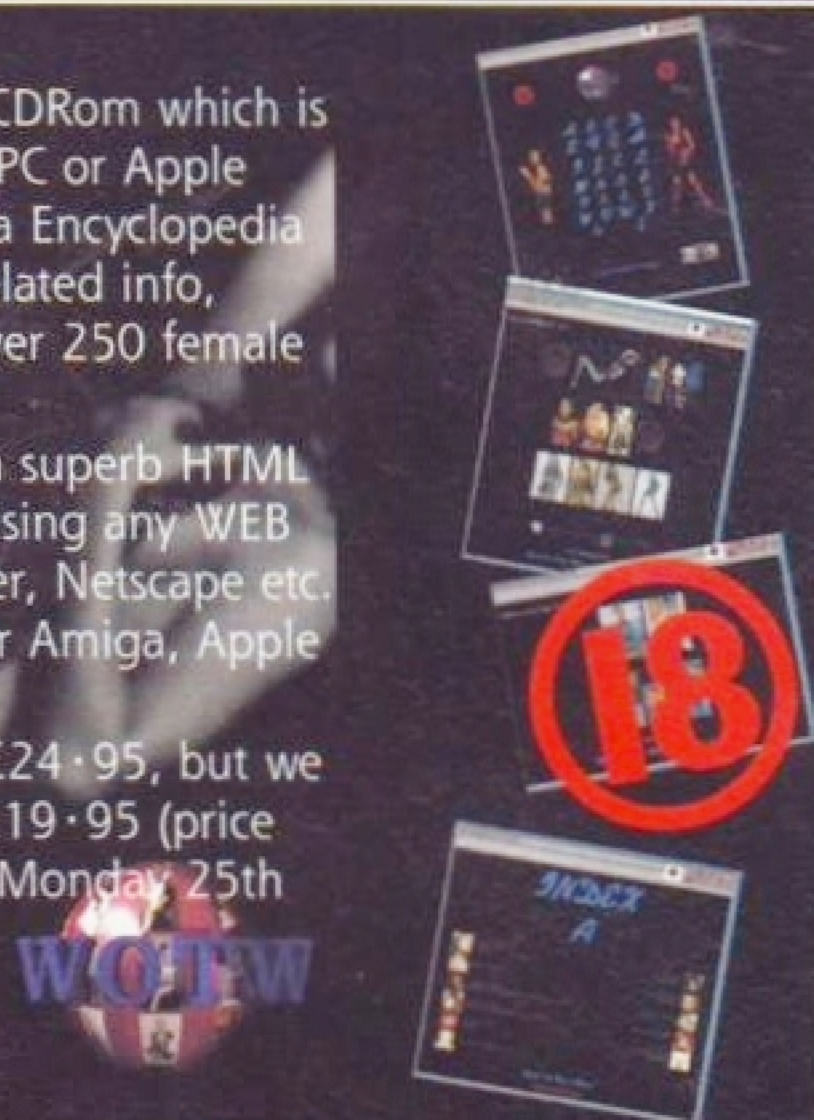
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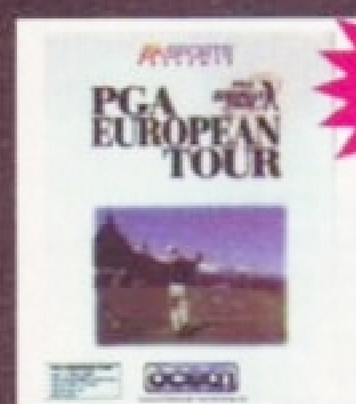
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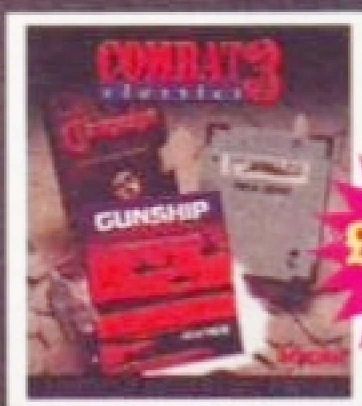
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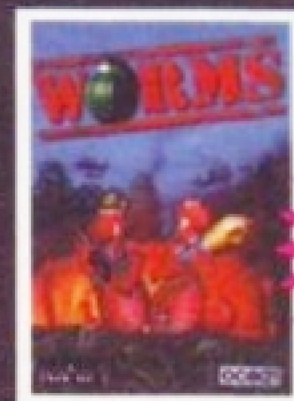


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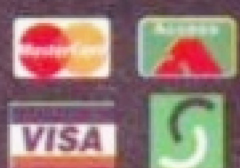
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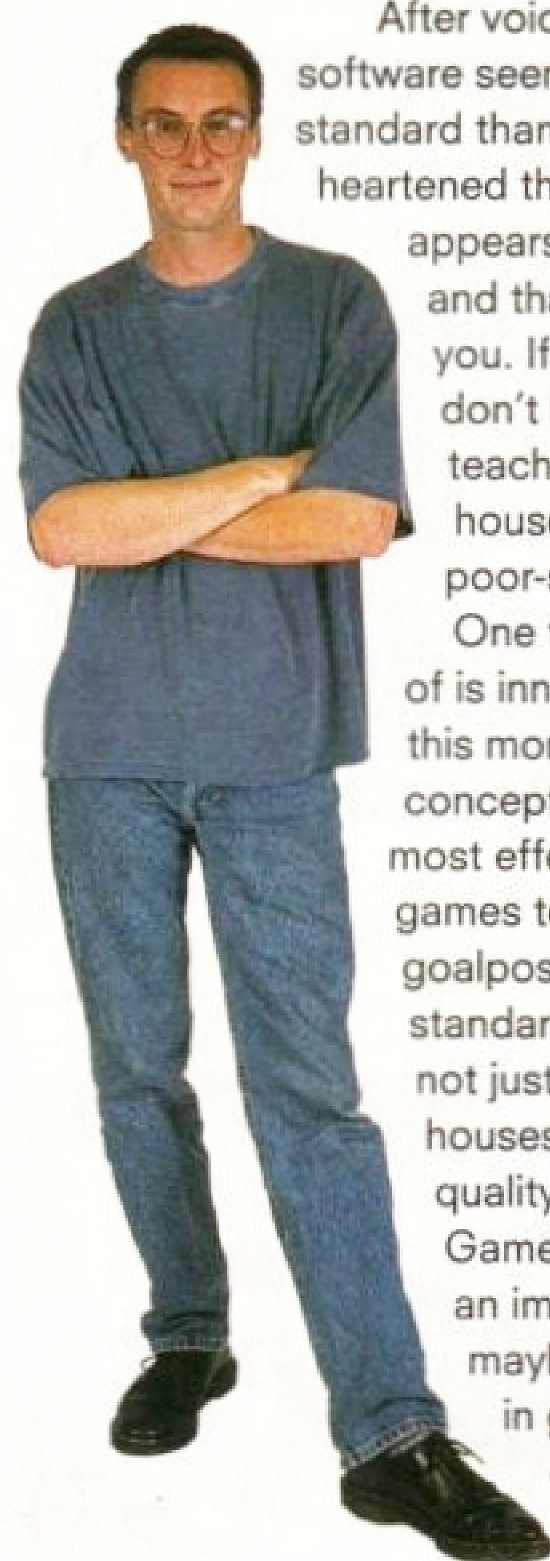
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SCREEN PLAY Previews

Oooh! All those goodies at the bottom of the tree. Well, here are the latest considerations for big bro's Xmas list...



After voicing my worries that software seems to be of a lower standard than we're used to, I'm heartened that the trend appears to be ending and that's down to you. If a game's crap, don't buy it. Nothing teaches a software house quicker than a poor-selling game.

One thing we need more of is innovation. The games this month are hardly new concepts. Innovation is the most effective way for games to evolve. The goalposts shift and new standards are set. And it's not just the software houses' responsibility. The quality of the Reader Games show you can be an imaginative lot, so maybe the next Big Thing in games is going to come from one of our reader's? Here's hoping...

AMIGA FORMAT'S REVIEW POLICY

Every month we scour the world's software houses for the latest and greatest Amiga games. We try to ensure we keep you as up-to-date as possible and we'll stop at nothing to bring you the best, definitive, no-nonsense reviews of the games that matter.

WHAT OUR REVIEW SCORES MEAN

90+% The crème de la crème. Only the very best, most playable and original games are awarded an *AF* Gold – the most highly prized rating there is.

80-89% These games are very good, but due to minor flaws are not the finest examples of their genre.

70-79% Good games which are worth buying, especially if you have a special interest in a game type.

60-69% Average releases with somewhat limited gameplay and appeal. Games in this category tend to be flawed.

50-59% Below average games which are unlikely to impress your mates or your wallet. Avoid.

40-49% Overwhelmingly poor quality games with major flaws and appalling gameplay.

Less than 40% The absolute pits.

HELL PIGS

Most Amigas ■ Vulcan Software ■ 01705 670269



It's got graphics. And action. And adventure. That must surely make it an action graphic adventure. Or something.



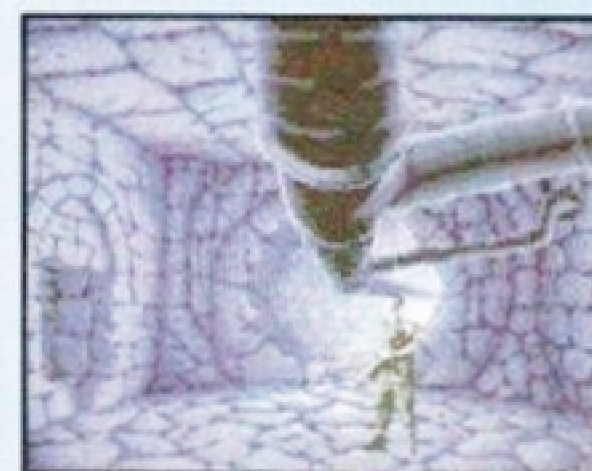
Subtitled '*Lets kick some Ass*', Vulcan have voluntarily given this game an 18 certificate because, in their words, 'of the adult design and language'. Vulcan are also describing the game as the biggest graphic action adventure game ever – and they could well be right as the game currently looks likely to fill a staggering 22 floppy disks. Thankfully the game is hard disk installable (as long as you've got 20Mb free) and will also be available in CD-ROM format.

Actually the CD version is also set to contain some full motion video and actor speech throughout. The rest of us will have to be content with the 'ordinary' stunning visual backgrounds, state of the art character animations and filmatic scripted storyline.

That storyline revolves around four characters (the Hell Pigs) – an elite bunch of hardmen sent to investigate the curious happenings surrounding a recent alien visitation.

The plot unravels as the game evolves but you can be pretty sure that there's going to be some decent adventuring as well as the odd spot of adrenaline-pumping shooting action.

The floppy version of Hell Pigs is due for release first, at the start of '97, with the CD version following a month or so after that. We'll have a full review for you as soon as we get the game so in the meantime you'll just have to enjoy the piccies...



This intriguing location seems to be absent as regards pigs, or other farmyard animals.



Obviously the hardest mercenaries in the business are part of your team.

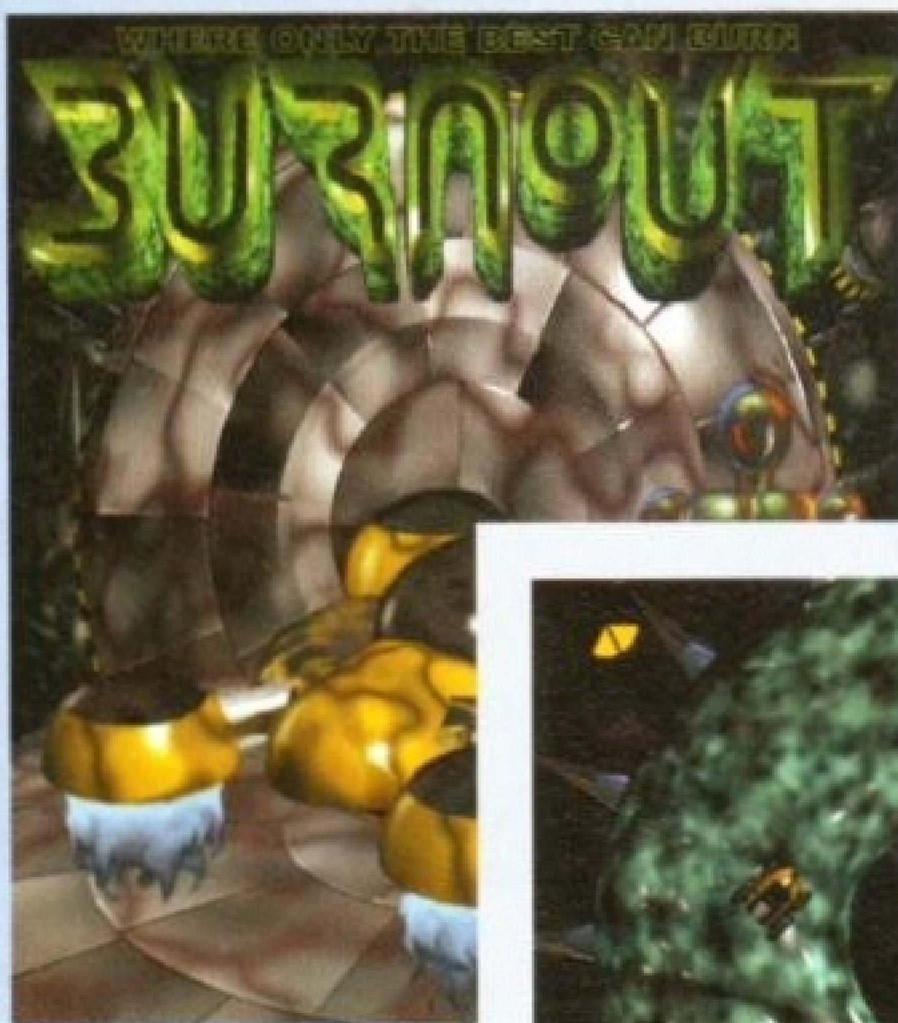


This cinematic styled wide shot is a good example of how Vulcan see the film-like action of the game developing.



I smell aliens. There's bound to be one around here somewhere. Maybe it's in disguise...





BURNOUT

Hard drive Amigas only ■ Vulcan Software ■ 01705 670269

Confirming their on-going commitment to the Amiga, Vulcan have also got a driving game lined up for release at the start of December. The game is a multi-player affair (human or computer opponents) in which the player controls a futuristic car and battles it out with the other players in a variety of different arenas (sounds a bit like *Destruction Derby*, but on the Amiga doesn't it?). New cars and arenas are to be released in the New Year as expansion disks, so you can keep adding to the game. We'll be putting *Burnout* through its paces next issue.



With an interesting line-up, Vulcan are fast becoming the most prolific games publishers for the Amiga.

Bounce your opponents off the giant mouldy doughnut in order to win this multi-player drive-em-up.



Nice graphics and lovely rendered vehicles, but we're eager to find out how it plays...

MINSKIES FURBALLS



Blobby, furry things and fish – boy, this game has everything but giant pictures of parrots... oops.

All 1Mb Amigas ■ Binary Emotions ■ 01722 416074

Combining all the latest tricks and treats that have evolved in the *Tetris/Columns* puzzle genre is this blast from Binary Emotions. The idea is simple enough – get four or more of your little cats (that descend from the top of the screen) in some kind of line (diagonal lines or having them all bunched together counts) to cause them to disappear. This has the added benefit of dropping a fish icon on your opponent's stack. Your opponent then has to get rid of the fish.

There are weapons to pick up, there are multiple opponents and



Tactics are everything in this *Tetris / Puyo Puyo* derivative action puzzler from Binary Emotion.

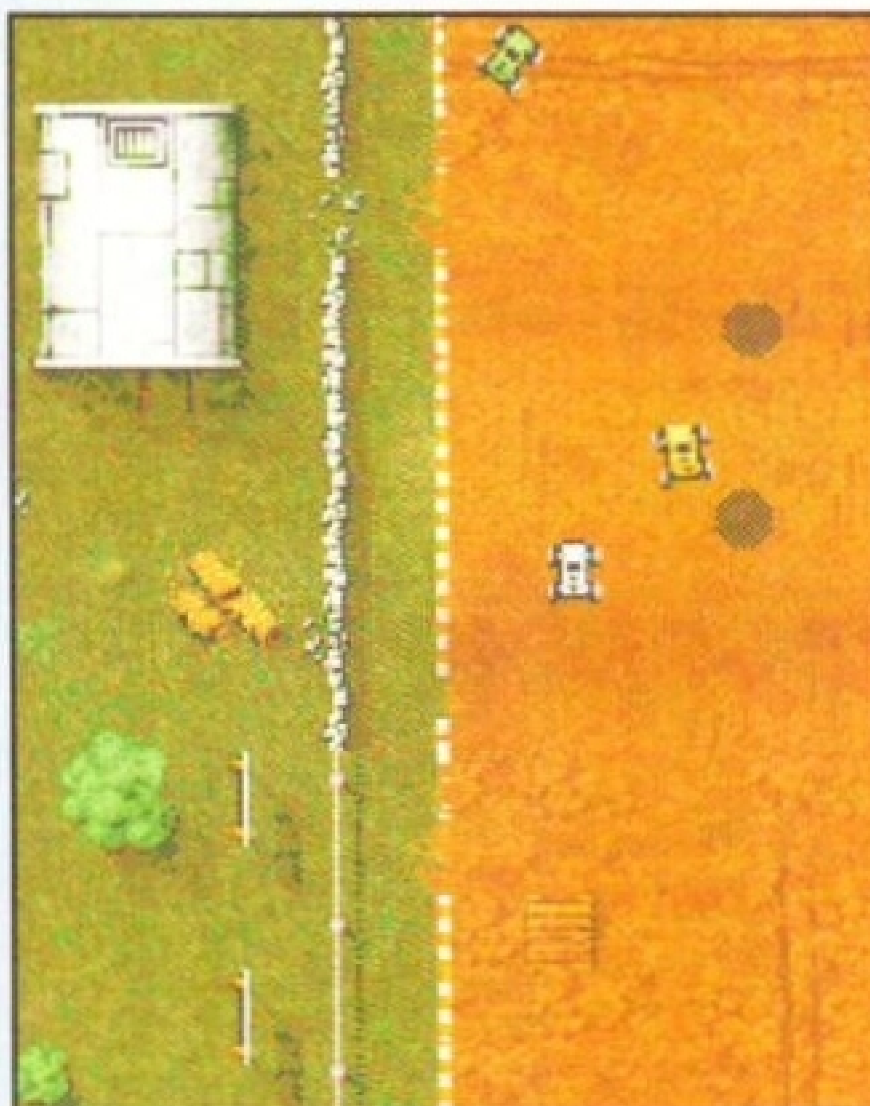
Binary Emotions are working on a four player link-up which they hope will make it into the game. Basically, this is shaping up to be the last word in 'dropping shapes' puzzle games and we're eager to get our hands on it. Full review just as soon as we can.

MAX RALLY

All Amigas ■ Fortress ■ 01902 834065

Fortress are a new bunch of teenage programmers planning on taking the Amiga market by storm with their first game *Max Rally*. It's a multi-player overhead racing game in the same mould as *Supercars* or *Micro Machines* or *ATR*, but Fortress are swift to point out that *Max Rally* is not based upon the look or feel of any other game.

There's racing on several different terrains and a one-player championship mode plus time trials and the curious Max Challenge. What exactly that is we don't know just yet, but when we get the game in (it's due for a mail-order only release in early '97) we'll let you know all about it.





Top down racing with tiny cars over a variety of tracks and terrains. It's been done before, but can *Max Rally* do it better.

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WORMS THE DIRECTORS CUT

Andy Smith polishes his grenade launching skills and steps up for combat. Again.





Up in the Alps where you're bound to come across some mountain erm, goats? Sheep? Rams?



Down on the beach and it looks like someone's dropped a couple of cream horns.



A rumble in the jungle and the Royals have a chance to get their own back! Go Di!

When Team 17 decided to produce a new version of *Worms* it seems the brief was simple. "Just put any features in that you couldn't squeeze into Worms when you first did it. Go mad, have fun!". And that's pretty much exactly what original *Worms* creator, Andy Davidson did with *Worms – The Director's Cut*.

And why the devil not? *Worms* is a phenomenally successful game that's been enjoyed by thousands on many different platforms – even PlayStation gamers have realised that a game doesn't need polygon characters running around 3D worlds to be fun – and while *Worms 2* is still some way off surely there's some mileage to be gained by adding new tweaks and twists to the existing engine?

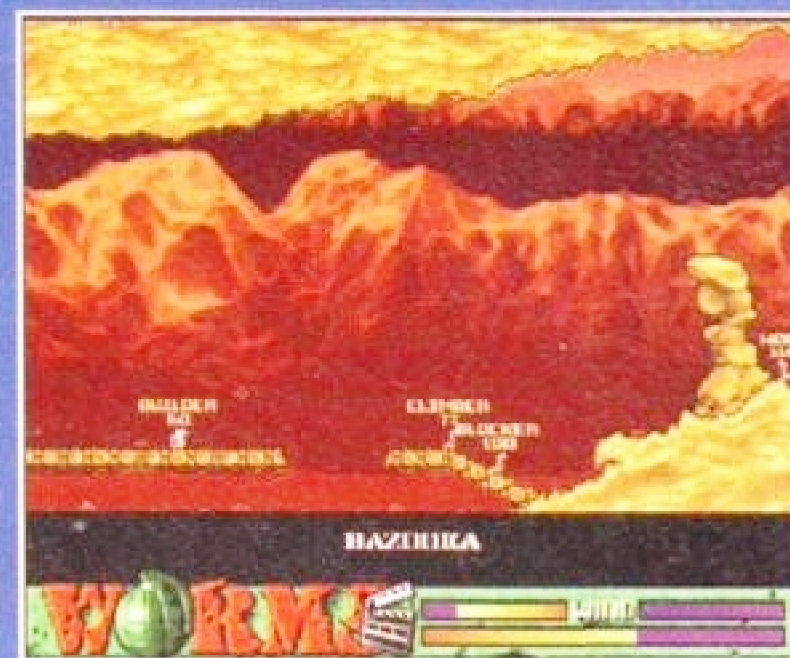
And those twists and tweaks? A few more weapons (homing pigeons, mad cows, sheep on a rope, concrete donkeys – you get the picture) and the ability to scribble on a blank screen and have the game take that scribble and turn it into a landscape. Or you could do pictures if you want. Or maybe a combination?

The other major game change (well, more of an expansion) is the ability to change the stats for the weapons and things – if you now think a bazooka shot should be able to take an enemy worm out first time, then change the strength of the bazooka's shots. There's a league, where two to four teams compete (there are five computer controlled teams of various abilities to play with but it's perfectly possible to create as many teams as you like with intelligence settings from 1 – 10).

There's the familiar 'friendly', plus a tournament mode where 4-8 teams

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A cavern level. No chance of any airstrikes here I'm afraid, so plan your tactics well.



"I love the smell of Napalm in the mornings". To be said after each airstrike.



The ever so secret concrete donkey. Not much of a secret anymore I'm afraid.



A mad cow explodes to good effect while another follows swiftly behind it. Mooo!



In another cavern level. Cluster bombs spread their destruction over a wide area.



Boom! Grenades are always worth chucking around when you get the chance.



When you're stuck in the landscape, blow torch your way clear. Easy innit?

compete in a knockout tournament, with each match lasting a pre-set number of rounds (sort of best out of three type thing).

So there you go. What you now need to know is whether to rush out and buy the game – especially if you've got a lovely AGA machine. I wouldn't bother mate. Shock, horror. Sorry everyone, I just don't think there's enough here to make it a worthwhile purchase for *Worms* fans. Sure, if you don't already own *Worms* – which is a damn fine game, worthy of a *Format Gold* any day – then you should get yourself down the shops pronto. But if you do already own the original then you're not really missing anything if you save your money by not buying this.

But what about all the new landscapes and the cavern levels and things? I concede that they alter the 'flavour' of the game slightly, but not enough to make that much of a difference. The graffiti mode does make it very easy to create your own landscapes, and that can only be a good thing but it's just not enough to write home about.



Create your own landscape and then battle it out on your lovely creation.

I think you're getting the drift now. Sure, *Worms* is a top game because it's pure competition – in the same vein as something like *Micro Machines* – and that's why it's great fun and that's why you can keep playing and playing. But *Worms – The Director's Cut* is just *Worms* with a bit of icing. Much like *Sensi Soccer's European Championship Edition* (but without the glaring errors, Sensi) which you'd be wasting your money on if you already owned *Sensi Soccer* in one of its various incarnations, this would be a waste of money for anyone who already has the original.

EASY WAY OUT

It's an increasing problem with games these days. Publishers and developers are increasingly scared of innovation. A game costs a substantial amount to develop and if publishers are going to recover that money they've got to make sure they're developing the right games – that often means they take the easy route of producing a sequel. Call it 'The Director's Cut' or 'Special Edition' and sit back and hope the games hungry public lap it up. Most of the time it works (when there are enough new features to merit a new version) but the price we pay is a lack of innovation and inspiration when it comes to new designs.

Hats off to Team 17 for having the balls to bring us *Worms* in the first place but *Worms – The Director's Cut* looks like old rope to me and I just hope they've got a lot of new ideas for any further games bearing the *Worms* name.

Distributor: Ocean
PRICE: £24.99
REQUIREMENTS: A1200 2Mb RAM

GRAPHICS: ●●●●○
Very nicely detailed and varied

SOUND: ●●○○○
Squeaky voices and spot effects. Nothing spesh.

ADDICTION: ●●●●○
You can't stop playing with the little beggers!

PLAYABILITY: ●●●○○
Using weapons properly can take some practice.

OVERALL VERDICT:
Harsh though it seems, I can't recommend this to anyone who's got the original because you'd be sorely disappointed by the lack of any substantial additions.

45%

But! Of course Worms is an excellent game that should be in everyone's library. No, nonsense to that it should be sitting in everyone's disk drive! A classic game that you'll play and play and play.

90%

Under the tree

There have been some tremendous games released for the Amiga over the past 12 months and if you missed them first time round here's Andy Smith's guide to the highs and highs of the last year's software releases.

January



The best helicopter action game of all time from Binary Asylum. Or so Bob says.

Things kicked off to a red hot start even in the cold month of January. There were a number of games rated in the 80's but the month's two Format Gold awards went to *Breathless* and *Zeewolf 2*.

Breathless (Power Computing: 01234 273000) is an excellent *Doom*, but on the Amiga, clone that moved Steve McGill to say such things as: "If the Amiga was compared to King Arthur, *Breathless* would be Galahad – the worthiest and most able champion in the land. It can't be recommended enough."

High praise indeed, but not the game we're actually going to pick out as the month's best game. That accolade goes to *Zeewolf 2*, the helicopter combat action game from Binary Asylum (01225 428494). This Format Gold corker will have all military hardware fans salivating. And yes, I'm biased because I helped design the game during my time at Binary.

There was also an ad for *Championship Manager 2* running in the Jan 96 issue of *Amiga Format*, promising the game would be available soon.

February

Player Manager 2 found favour with Steve McGill but the month's best game was far and away Effigy Software's (01526 834020) *Pinball Prelude, The Future Table*. One time semi-professional pinball player and ex-*Format* Prod Ed Rich Jones found himself saying "...it makes *Pinball Prelude* a fantastically varied game. Not so much a pinball simulation (who needs 'em) but a top game with flippers and balls."



"A top game with flippers and balls" is how Mr. Jones described *Pinball Prelude* (top) while Scottie got carried away by the realism of *Player Manager*.

Domark were now promising that *Championship Manager 2* would be out in Feb '96. This month also saw the first preview of a game called *Capital Punishment*.

March



***Ultimate Soccer Manager* (top) continued the tradition of top Amiga footy games while *XTreme Racing* (above) broke new ground.**

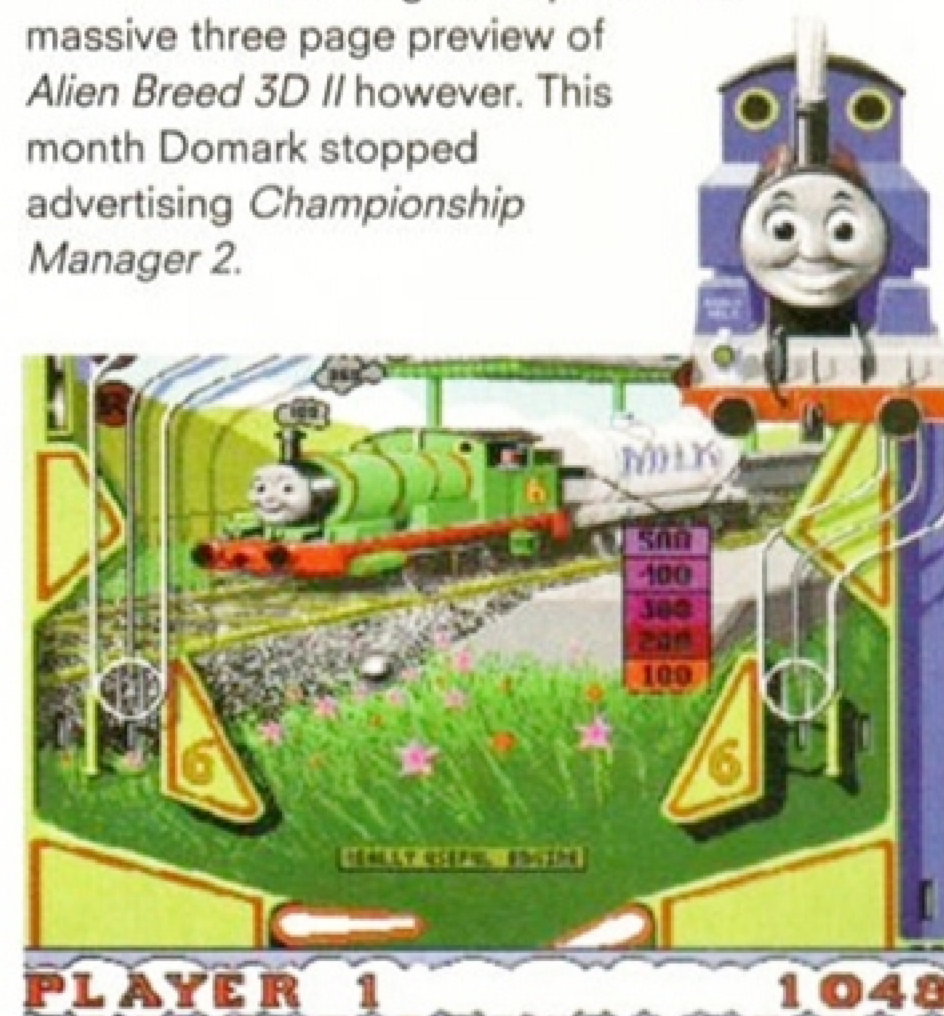
Alien Breed 3D II gets its first preview while the game of the month is easily Black Magic's (01302 890000) *Gloom Deluxe*. Another *Doom*, but on the Amiga, clone, *Gloom Deluxe* is essentially the same as *Gloom* but without the need for it to be run on AGA Amigas. Steve McGill liked it enough to say: "As it stands, if you own an Amiga 3000 or an accelerated 1500/2000 then you should go to the shops and buy this game now. Anyone with an AGA Amiga who doesn't already own *Gloom* should also consider the game as a must have. Go for it.".

Other games of note this month included the fabulous *Ultimate Soccer Manager New Season Add-on* and the excellent driving game *Xtreme Racing*. Domark were now promising *Championship Manager 2* would be released on February 29th.

April

Sadly, in what was to become a worrying trend, there were no decent games this month. The best scoring game of the month was none other than *Thomas the Tank Engine Pinball* (Alternative Software, 01977 797777 CD32 version). And we can't really recommend you rush out and buy that because we only gave it 70%.

Steve did manage to squeeze in a massive three page preview of *Alien Breed 3D II* however. This month Domark stopped advertising *Championship Manager 2*.



Thomas and his chums prove (with some flair) that pinball isn't just a grown-ups game.

May

Chaos Engine 2 got its first preview (taking over from *Championship Manager 2* in the 'it'll be released soon' category). Pinballing fan Richard



The shape of things to come? The rather excellent looking *Chaos Engine 2* was previewed in May.

Bumper Christmas Giveaway

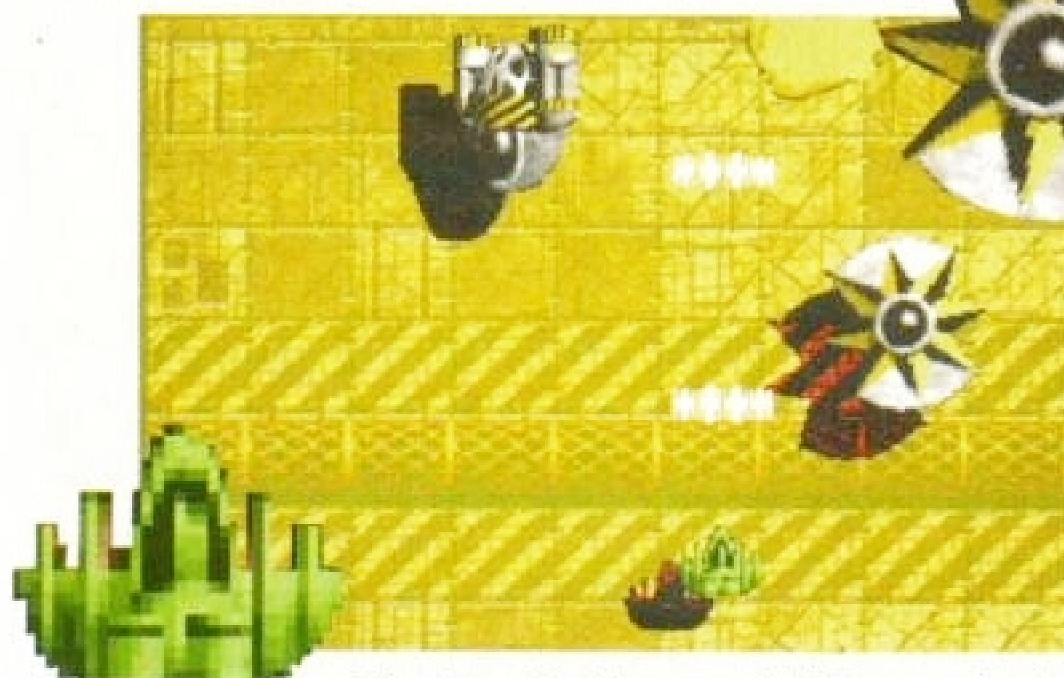
We've got three copies of Format Gold winning *Breathless* to give away. *Breathless* took the Amiga world by storm – remember though – you need an AGA Amiga to run it. Send a postcard with your name address and telephone number to the following address:

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MK41 7RW

Jones was back again for the review of *Slam Tilt* (21st Century, 01235 851852). Richard liked the game so much he gave it 93% and showered it in glory. "Brilliant. Flipper control is everything you could possibly ask for. Compelling pinball action packed with humour and hidden depths. Plays like a dream." Richard said. Back in May.

June

Domark were now advertising *Total Football* while Steve McGill had gone



The inexplicably named *XP8* proves just what can be achieved with a bit of talent.

off to join Team 17 (hmmm, aren't they the ones who were doing *Alien Breed 3D II*?). Steve Bradley was still around and he was mightily impressed with the month's big game, *Legends* (Guildhall Leisure 01302 890000). *XP8* and Vulcan's *Time Keeper's* expansion disk both showed well too. It's decided that the Reader Games section should become monthly after we start getting such good (and so damn many!) submissions.

July



Rage Hard – if the fight gets boring, you can always take your fury out on the innocent bystanders.

Summer came with a vengeance. So did the quality software. *Primal Rage* had us all at each other's throats but football was the genre of choice as both Time Warner's (0171 391 4300) *Sensi Soccer 95/96* (an apalling cash in on the Euro Championships that didn't even have the golden goal rule, and therefore only scored 20% until Nick made me give it 96% because it was *Sensi*) and *Total Football* came in. Both scored a Format Gold but we're going to plump for the *Sensi* game right now because, if you don't already, you really should own a copy.

Domark were still advertising *Total Football* in preference to *Championship Manager 2* and *Chaos Engine 2* was due 'real soon now'.

August

The Summer dearth of quality software hit us hard. The two commercial releases this month: Vulcan's (01705 670269) *Valhalla and the Fortress of Eve* and the *Exile Discovery Disk*



Neither the *Exile* supplement (top) nor the latest *Valhalla* (right) episode fare well, but both have cult status.

scored 51% and 50% respectively. BPM Promotions were in favour however as they began showing us their crop of games created using their own *Reality Software Construction* kit. For the month's best game however, if we really had to recommend one, well it would have to be the *Valhalla* game. Despite the fact that we can't see the attraction, tons of people have enjoyed the series.

September

The tremendously witty intro could do nothing to save *World Golf*'s 52% review score but thankfully there was Team 17's (01924 267776) *Alien Breed 3D II* to review. The game scored a



It's golf, but perhaps not as we know it. *World Golf* provides a simplistic but playable simulation.

whopping 96% and moved Andy Smith to comment: "If you've already got a *Doom* clone like *Alien Breed* or *Gloom*, you haven't got the best. This is the best. Go and get it and don't worry about having any spare time for two or three months." One of the best games for a while – especially if you've an accelerated Amiga. Adverts for *Total Football* stopped while ads for *Capital Punishment* started.

October

One of the best cricket games to hit the Amiga hit the Amiga this month in the shape of *Brian Lara's Cricket '96*. Audiogenic (0181 424 2244) finally managed to clear up some of the bugs



that had dogged the earlier incarnations of the game and produced a quality item. Anco on the other hand scored a huge own goal with their *Kick Off '96*. *Kick Off* once ruled the Amiga world as the king of



The bowler's Holding, the batsman's... no, we'd never get away with that. *Lara's Cricket* did though.

football games but this latest incarnation earned them a meagre 9% and lost them a huge amount of respect.

November

BPM Promotions had us all on the edge of our seats with a preview of their intriguing title *Soccer Sensible* – a football trivia game while *Humans III* and *DNA* failed to impress.

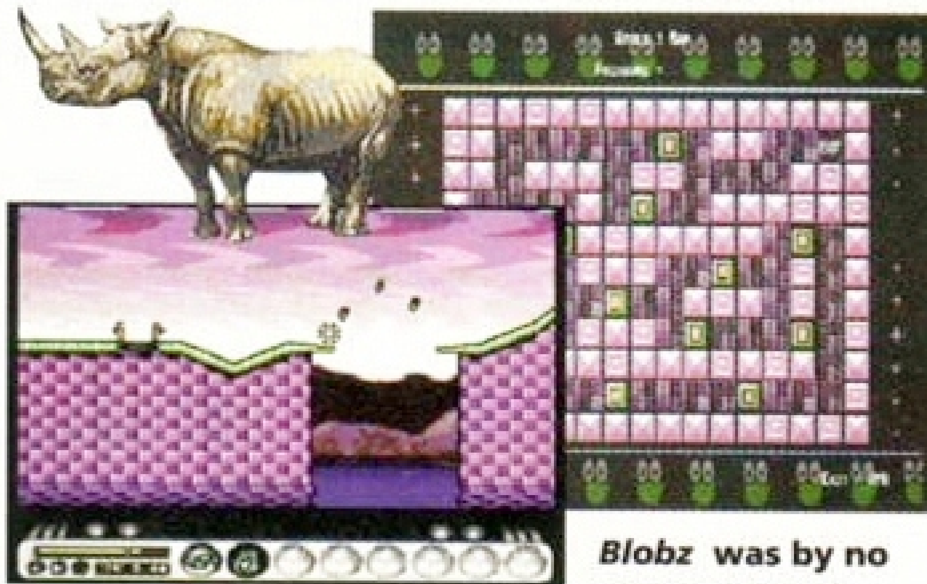


Humans III – although the original had been innovative, it looks like ideas had run out by now.

ClickBoom's (based in Toronto, ring here for details) *Capital Punishment* came in for review and local beat-em-up expert and ex-Format technical bod Graeme Sandiford found it very much to his liking. Despite the rather dodgy 'bird with her baps out' character the game was described as "Not only one of the best beat-em-ups for a long time, it's one of the best games we've seen for a while." Rumour had it that both *Championship Manager 2* and *Chaos Engine 2* were finished, but neither of them actually appeared.

December

The office was filled with chortles as we played the CD32 game *Kang Fu* as it proved itself to be truly dreadful, scoring a rather generous 20%. Best game of the month (in fact the only other commercial game of the month) was Apex



Blobz was by no means a must-have game, but proved to be a worthy puzzler.

Systems' (01709 890552) *Blobz*. A worthy, but not especially excellent *Lemmings* variant. The world may have been cold outside but *Amiga Format* were finding their new offices very warm (Format hadn't moved office for seven years, so you can imagine the amount of rubbish we'd managed to accumulate in that time). The future didn't look as bleak as we'd been lead to believe as both Domark (now Eidos) and Time Warner promised we'd have *Championship Manager 2* and *Chaos Engine 2* to review. We're still waiting, but hey! What's a year between friends? 97 looks like it's going to be off to a bright start though – we really are getting those two games in for review. Apparently. Nick, Andy, Ben, Cathy, Linda and Andrea are all holding their breath...

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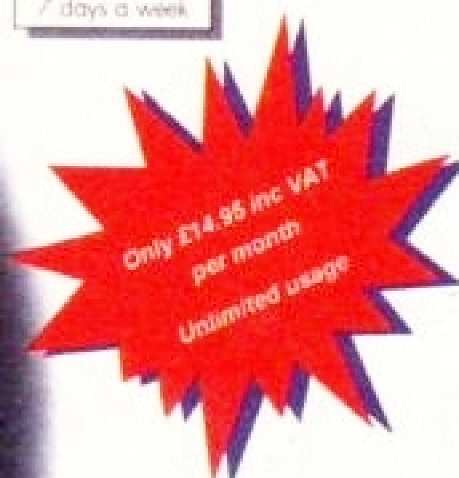
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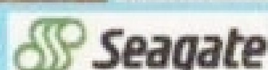
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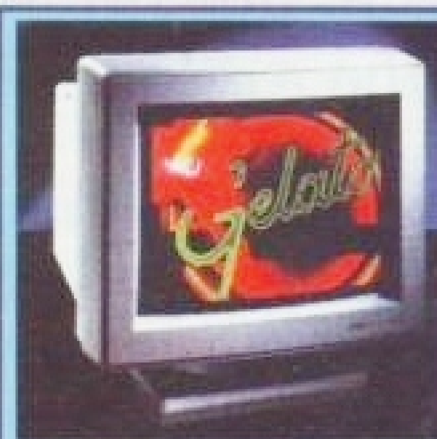
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Laaaaadies *and* Gentlemen

Welcome to this year's family spectacular, coming straight out of the back bedrooms up and down the country. Thrill to the dazzling spectacle that is...

Reader Games *on Ice*

What could be better during the festive season than a family outing to a lavish West end production? Nothing of course, which is why *Amiga Format* is proud to extend the hand of friendship and take you all out for the afternoon to see this month's glitzy show of games created by you, the readers.

You'll find a free bucket of popcorn by your chair, so grab a mouthful, settle back and prepare for the visual delights to wash over you. And remember folks, if you enjoy the show why not take part? You might think your attempts to create that 'killer' game have fallen way short, but you might be surprised. The idea here is not to look at these games in the critical manner of the rest of the reviews section – we're merely casting our professional eye over your offerings and volunteering our constructive criticism and advice on where – if anywhere – you've missed the gameplaying point.

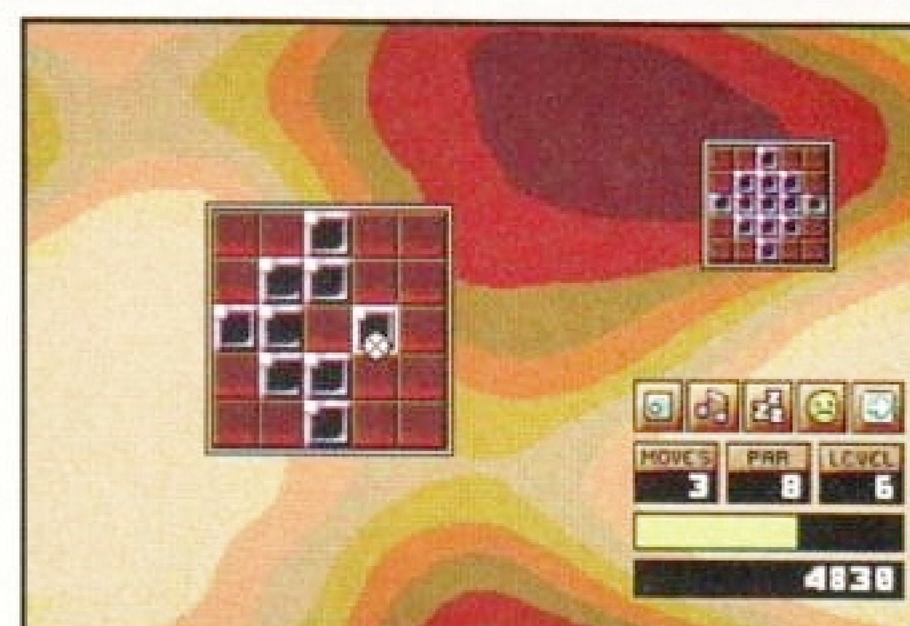
If you've had a go at writing a game, send it in because there are prizes to be won for all those we show. Oh, quick, the curtain's coming up...

Continued overleaf ➡





Hmmm. Maybe by pressing the button now I'll get rid of all the blocks in the corners? No. I didn't think it would.



Oh my giddy aunt! It's all getting a bit big and confusing and therefore more difficult. And the time's running out!

← GAME: OVERDOSE AUTHOR: MATTHIJS HOLLEMANS LANGUAGE: BLITZ BASIC 2

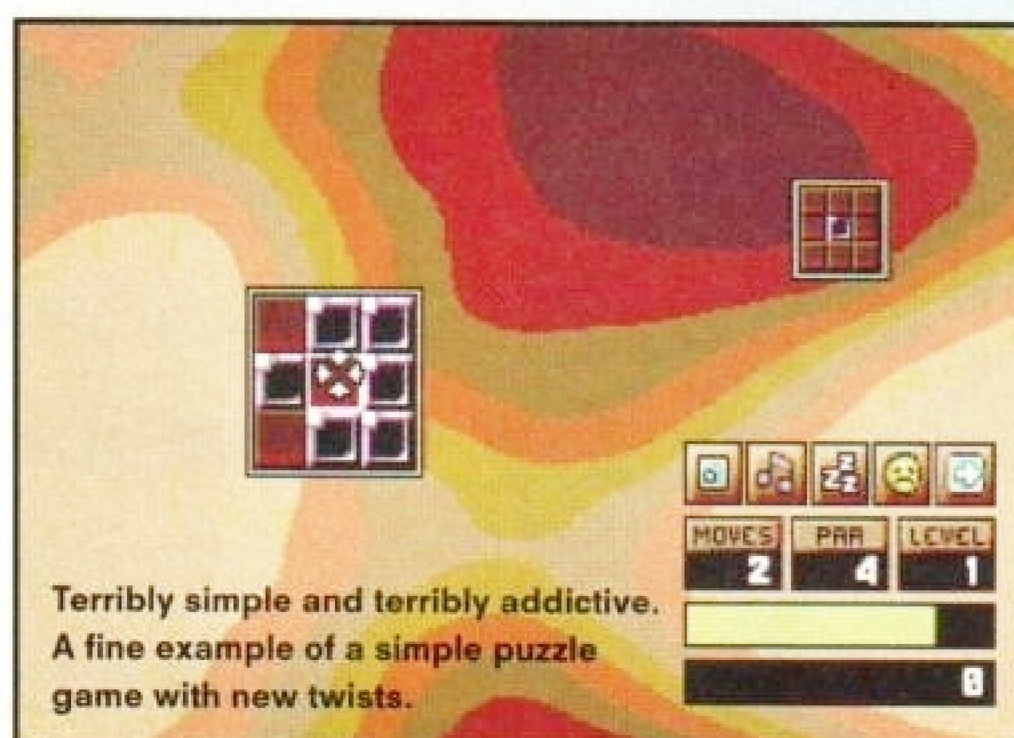
The thundering applause gradually dies. Trumpets blare as *Overdose* skates right to the centre of the arena and halts with a spray of ice around its feet, arms outstretched. The house lights dim and a stark, powerful spotlight shines on the brave reader game.

Puzzle games have always done well on this particular stage. The knowledgeable audience appreciates the enormous involvement a simple idea can bring. *Overdose* starts its routine on a good note and goes on to reveal the substance that has brought it thus far. All eyes turn to the screen and observe the two windows. The small top right window reveals the pattern the player is attempting to create, by manipulating the blocks in the larger window.

By simply clicking on one of the squares of the grid that makes up the larger window, the player can cause blocks to be either created or destroyed.

Imagine a square of nine blocks. Click on the middle block and the four adjacent to it (top, bottom and either side) disappear. Now click on the empty space left by the disappearance of the top block and it causes the two either side of it and the one below it (which was our original middle block) to disappear.

Overdose had the audience on the edge of their seats. This was obviously an act that required close attention. Fortunately it all became much easier to appreciate when the crowd had watched the act for just a few minutes. The patterns became harder to mimic. The grids became much larger, shaped differently and the introduction of different coloured blocks had the majority of the audience in rapture. Especially when they realised that not only did you have to recreate the pattern in the small window but you also had to try and do it in a limited number of moves!



Terribly simple and terribly addictive. A fine example of a simple puzzle game with new twists.

VERDICT: *OVERDOSE* IS THE KIND OF DESKTOP GAME YOU CAN PLAY FOR 10 MINUTES OR FOR TWO HOURS. IT IS CONSUMMATELY PRODUCED WITH SOME 50 LEVELS AND THIS COULD KEEP YOU PLAYING FOR A VERY LONG TIME INDEED.

BUT OVERDOSE's AUDIENCE IS LIMITED. IT WILL ONLY EVER REALLY APPEAL TO THOSE WHO ENJOY PUZZLES – THE KIND OF PERSON WHO LIKES *MINESWEEPER* ON THE PC FOR INSTANCE. A REALLY BRIGHT START TO THE SHOW. BUT THE CROWDS WANT MORE...

GAME: FRUIT MACHINE AUTHOR: PHILIP HOLT LANGUAGE: ASSEMBLER

The theatre is filled with eager chattering as the audience remark to one another on the already high standard of the show. Again, the lights dim, voices hush as another spotlight showers the centre of the arena in stark white light. The crowd erupts in cheers and laughter as the clown *Fruit Machine* stumbles into the light.

"Cybermoney!" *Fruit Machine* shouts his famous catch-phrase. "Cybermoney!" The audience shout back the expected reply. *Fruit Machine* launches into his familiar routine of nudges, holds, gambles and start/collects. The crowd chuckles at the flippant antics that are displayed before them. Howls of laughter as *Fruit Machine* hits the jackpot and again cries "Cybermoney!".

Everyone enjoys watching *Fruit Machine*, and they're fully aware of just how refined and well polished his act is. They're fully aware how the time passes when he's playing but at the back of their minds is always the knowledge that his act is an act of futility. There is no point to *Fruit Machine*. Unfortunately this usually means that once you've seen *Fruit Machine* once there's no reason in the world to want to see it again.

Fruit Machine finishes his act and skates off the rink. The crowd ripples with appreciative applause as they wait excitedly for something more substantial to emerge.



Hold your plums! I love that gag. It's nearly as funny as making a game that allows you to gamble small amounts of CyberMoney™ to try and win more .

VERDICT: LIKE ALL FRUIT MACHINE SIMULATORS, THERE'S NO POINT TO THIS. YES IT'S WELL PROGRAMMED, YES IT'S WELL PRESENTED AND ALTHOUGH THERE AREN'T THAT MANY FEATURES IN THIS PARTICULAR INCARNATION AND ALTHOUGH PHILIP HAS SHOWN HE KNOWS HIS WAY AROUND ASSEMBLER HE'S ALSO DEMONSTRATED A KEEN ABILITY TO WASTE HIS TIME!



A fruit machine. Yesterday. Cries of CyberMoney™ can be heard throughout the auditorium. Change a fiver?



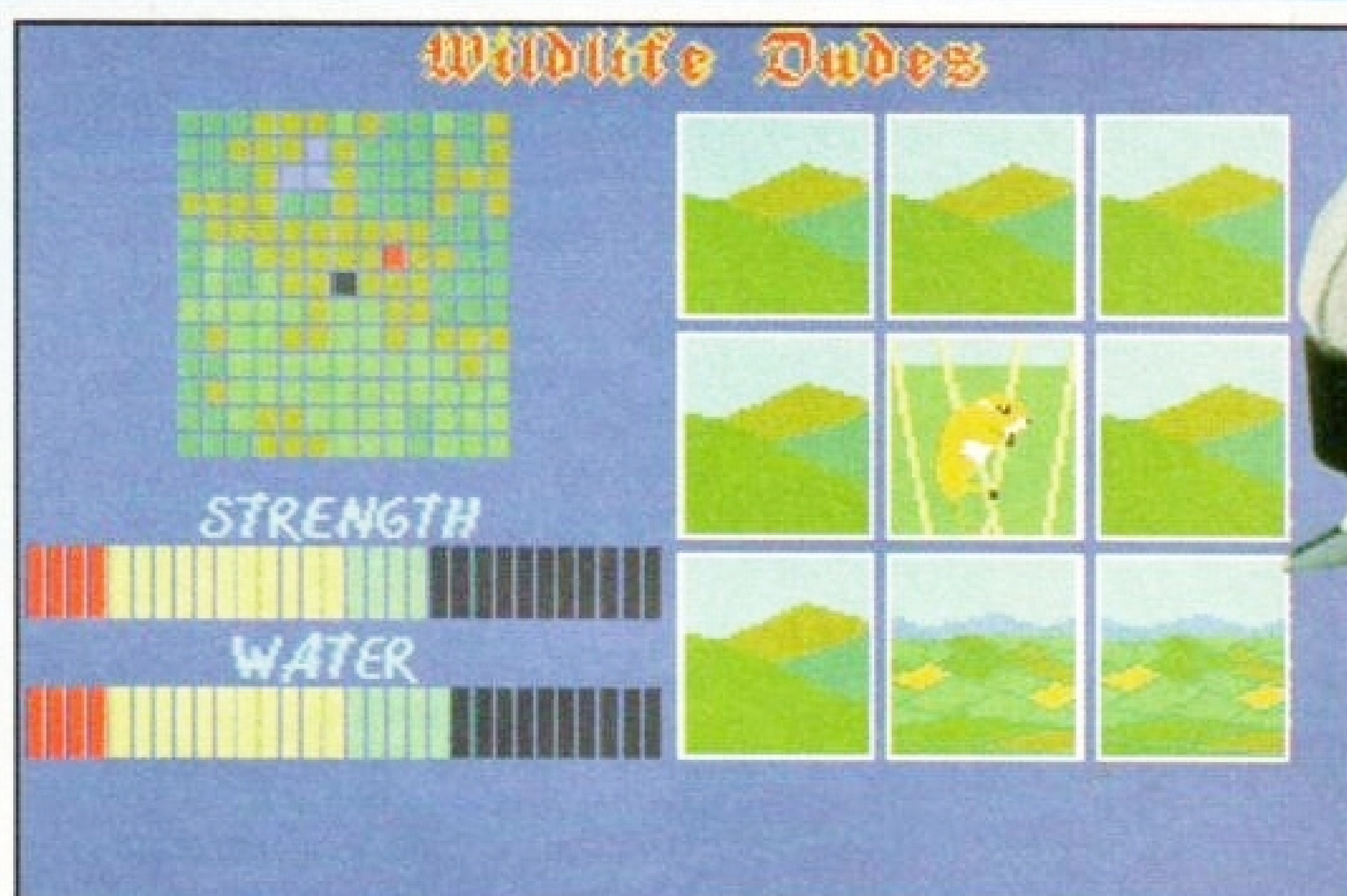
Six nudges eh? That should make winning some CyberMoney™ a whole lot easier. Now then, which one?



Selecting a 'dude'. I quite fancy being a harvest mouse. You know, keep me head down, nibble some seeds...



After an all too brief wander round the countryside, death has come to greet me. Still, the seeds were nice.



Here I am, surviving day to day. There's a predator coming in from the top right so I'd better think about legging it off bottom left before he's on top of me. Ooer. Hope that doesn't offend Cathy or anything. Right here I go...

GAME: WILDLIFE DUDES
AUTHOR: STEPHEN CORRY
LANGUAGE: AMOS

There's a more serious air about the auditorium. The crowd are now ready to taste the main course of the afternoon's performance. Soft music begins to play, the lights dim but unlike before there's no glaring spotlight. The crowd subconsciously acknowledge the more sophisticated aura around *Wildlife Dudes* as it gracefully skates around the arena.

Suddenly *Wildlife Dudes* launches into its routine as first it adopts the persona of a tawny owl eking out its existence in the countryside – the owl chases food, seeks out water and avoids predators before eventually passing away. *Wildlife Dudes* is a sort of eco-sim. The player picks one from a half dozen or so animals (buzzards, hedgehogs and foxes included) and then simply attempts to keep 'em alive by moving them around a large map by clicking on adjacent squares, seeking out food and water.

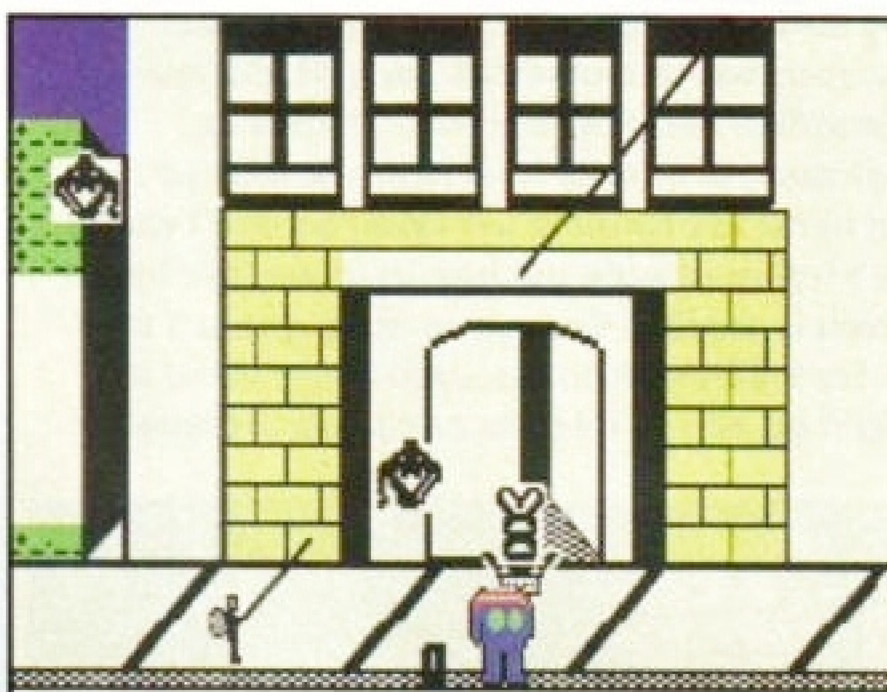
A larger scale map with your chosen animal is displayed on the right and the player simply clicks on one of the surrounding squares to move into that new location. The game simply continues in this fashion until your animal dies (usually caught by predators, or through lack of food), when you simply pick another animal and try again.

Wildlife Dudes has the audience captivated. Although the story is essentially: animal lives, moves about, eats something, dies – the audience appreciate the delicate way the story is told.

VERDICT: ***WILDLIFE DUDES*** **IS ACTUALLY A LOT LIKE** ***DALEKS*****. YOU SPEND THE WHOLE GAME SIMPLY MOVING TO ADJACENT AREAS AVOIDING THE RED DOTS THAT ARE PREDATORS. IT'S FUN BUT IT'S NOT REALLY THE EDUCATIONAL PROGRAM IT PURPORTS TO BE. FUN NONETHELESS AND WELL PRESENTED. PROMISING STUFF THAT ONLY REALLY NEEDS A COUPLE MORE FEATURES TO GIVE IT THE VARIETY IT NEEDS FOR MORE LONGEVITY.**



The quite dreadful *Horace in Space* game. It really is as bad as it looks folks. There is little hope.



The equally dreadful *Horace on the Spectrum* game. It is possibly worse than it actually looks too.



The even-more-dreadful *Horace on Drugs* game. Winners don't use drugs. Bad programmers, possibly.

GAME: HORACE TAKES A TRIP
AUTHOR: ZETH R WARD
LANGUAGE: SEUCK

The interval is over and the crowd re-take their seats in expectant mood. The interval chat has been good and most of the audience agree that *Overdose* is possibly the best performance of the first session. Everyone also thought *Wildlife Dudes* could be a star with a bit more spit and polish. What the audience weren't expecting though was *Horace takes a Trip*.

A homage to the 80's Spectrum star in a collection of intentionally funny vertically scrolling shoot-em-ups that look like they have just stepped off the old rubber keyed devil.

There's a general feeling of unease in the place. Nobody really knows how to react to this. The mix of emotions range from complete deadpan 'this is complete rubbish' to the rather more forgiving 'yeah, I can see how this could be a giggle' – but the overall effect is not very good.

Horace displays his mix of three distinct styles: *Horace in Space* (a bit like a crappy speccy space shoot-em-up), *Horace E'ing* (no, we don't know what he means either) and *80's Horace*. All exactly the same games featuring Horace (surprise, surprise) but with different background graphics.

The more experienced among the audience can at least admire how close to the original this parody really is but that certainly doesn't excuse the game.

VERDICT: HARDLY ANYONE GETS THE GAG. AT LEAST THE AUTHOR KNOWS THAT'S WHAT IT IS, BUT I'D HAVE TO DISAGREE WITH HIS STATEMENT THAT 'AT LEAST IT'S DAMN FUN TOO!' IT ISN'T AFTER A MERE TWO MINUTES. WHY WASTE TIME AND EFFORT CREATING SOMETHING THAT'S DESIGNED TO BE PANTS? SPEND THE TIME ON SOMETHING THAT AT LEAST HAS A SHOT AT BEING DAMN FUN.

Continued overleaf ➡



£50 winner

← GAME: BURTON BIRD
AUTHOR: ROLAND ROR
LANGUAGE: UNKNOWN



The quite wonderful *Burton Bird* is trapped underwater. Those blocks won't let him up either.



Burton jumps around gobbling up the apples and collecting the little bonuses they leave behind.



Burton chomps his way through a tree to get at the cherries in the middle. I have absolutely no idea why some should be grey while others are red however.

Before the crowd has a chance to settle, the whole arena is awash with multi-coloured lights, music blares and *Burton Bird* fairly flies into the centre. Smiles of delight are obvious on the faces of the joyous audience. 'Burton! Burton! Burton!' some wag at the back starts chanting as *Burton Bird* begins his familiar platform game routine.

Within seconds, the crowd are clapping along with the music as the frisky green bird scurrys around the screen attempting to grab all the fruit in order to clear the level. Sound-bites of entertainment enthrall the crowd as he moves from one platform to another in mere seconds. Howls of delight fill the air as first another *Burton Bird* attempts to clear the same level (and fails) and then another *Burton Bird* goes the same way as the second. Only the first Burton manages to make it several of the 87 levels in!

With objects to collect for points, and power-ups galore it's easy to see why *Burton Bird* is the favourite. Everything's just so well polished. We've got 80s gameplay with little added or taken away except for a few graphic tweaks to bring it into the nineties. Burton's the consummate professional – he knows what's important, but he also knows he's got power to take things further and that's what he does! AF

VERDICT: BRIGHT, BRASH AND BURSTING WITH GAMEPLAY. *BURTON BIRD* IS NEITHER YOUTHFUL OR FRESH BUT HE STICKS TO WHAT HE KNOWS AND DOES IT ADMIRABLY. NO WONDER THE HOUSE HAS AWARDED HIM THE COVETED PRIZE OF 'TURN OF THE NIGHT'. THAT MEANS HE'LL SOON BE RECEIVING £50 IN THE POST.

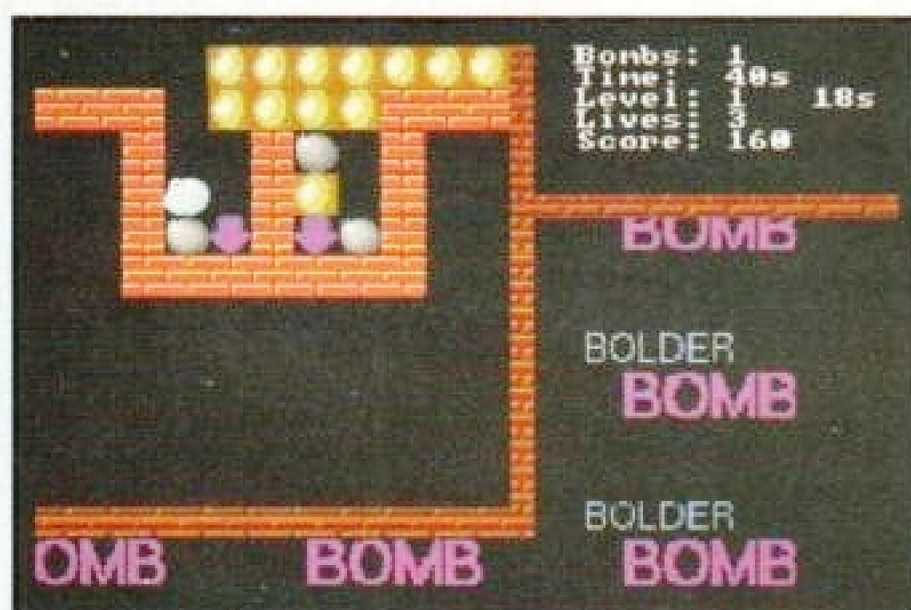
GAME: BOLDER BOMB
AUTHOR: GAVIN HASELHURST
LANGUAGE: EASY AMOS

And to wind up the spectacular that has been 'Reader Games On Ice' a truly comic offering knocked up during the school holidays: *Bolder Bomb* – a *Boulderdash* clone.

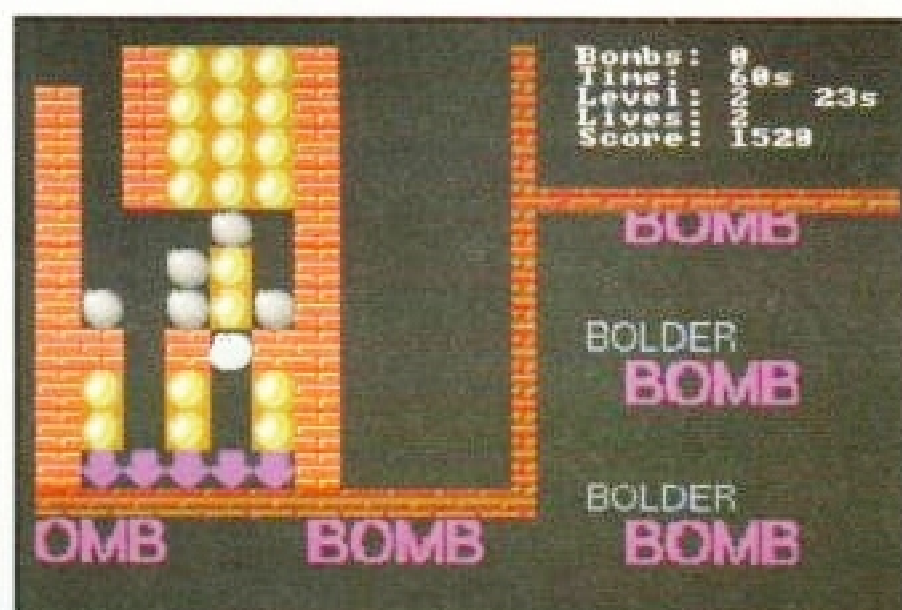
The plan is to rid each small maze of bombs by pushing them around and getting them to fall on the purple arrows(?). I say that's the plan because actually this is one of the most uncontrollable games ever to feature in Reader Games. Using the keypad to move your character around the screen sounds straightforward but actually it's damn near impossible as the delay between pressing a key and your character moving is several seconds which causes all sorts of hilarious scenarios. And not only that. There's no indication of exactly how many bombs you've got to rid to complete the level, so don't waste time trying to work out how to move that bomb which is stuck in the corner. Just ignore it and go for a different bomb – you never know it might be all you need to complete the level.

Apart from the dreadful controls and lack of direction there's nothing in here that hasn't been done before. All you have to do is move around and push the bombs onto the arrows.

When the game finally exits there's a polite ripple of applause before the crowd erupt into thunderous clapping when the cast re-appear to take their bows. Flowers are thrown to *Burton Bird* and as everyone begins to filter from the hall there's a general air of contentment. There's even excitement in some quarters as they contemplate the future of games, having just witnessed Reader Games on Ice. AF



You're the blue blob and must push the grey blobs into the purple arrows. But not all of them all of the time.



More exciting bomb pushing action. Rivetting stuff it isn't. Especially as I was trying to move downwards.

VERDICT: ONE OF THE BASIC RULES OF READER GAMES IS MAKE THEM AT LEAST WORK. THIS INCLUDES MAKING CONTROLS THAT YOU CAN ACTUALLY PLAY THE GAME WITH! EVEN IF THIS WORKED PROPERLY THERE'S NOT REALLY MUCH GOING ON IN THE GAME THAT HASN'T GONE ON IN GAMES SIMILAR FOR DONKEY'S YEARS. A FINE EXAMPLE OF WHY A GAME NEEDS MORE THAN A COUPLE OF WEEK'S WORK, IF IT'S GOING TO BE ANYTHING APPROXIMATING FUN TO PLAY.

MORE OF THE SAME PLEASE!

Every game featured in our Reader Games section wins an Epic CD and the winning entry also wins £50 from *Amiga Format* and another £50 worth of Epic CDs.

If that doesn't inspire you to get those submissions in then nothing will. Just a note of caution though: don't bother sending in that PD game you coded three years ago just to try it on, we'll spot it and chuck it in the bin. After we've erased the disk for good measure.

And, once the game's been featured here in your favourite magazine we'll be passing them onto Epic Marketing who'll take a look at the really good ones with a view to publishing them. There's nothing guaranteed but you never know – you might just get a phone call in a couple of months time. Please make sure you put a contact number or address on your submission (which you'll need to do anyway, or we wouldn't know where to send the goodies now would we?).

GameBusters

Imagine a game is like your Christmas dinner (good ones won't have sprouts). You've gobbled up your turkey (geddit?) and now it's time to pick over the bones for any juicy extras. Now imagine *AF*'s GameBusters is just the tool you need to get at those extras – I think you get the analogy...

KGB THE FINAL PART



Look! We're back in that bloody Maths class again! Actually these are the hard blokes I used to hang around with when I was second toughest in the infants.



Euurch! Back in this horrid room again. Of course, now you're following the tips you'll know exactly what you're supposed to be doing here. At least the lights are on now.



I say madam, it's a bit early in the morning to be dressed up like a dog's dinner, isn't it?

Phew! Well, you've come this far, time to move onto the last phase and get this game licked once and for all. We left the game in Ladoga Park waiting for Harry Greenberg.

Chapter Three

Dive into the sea, up, hide behind the fish boxes (to the right), down, go to the door, inspect the drawer, get belt and bottle, right, up, throw bottle into the sea (to the left!).

Go to stern deck, down, hide in the closet, repeat wait until 7pm. Wait, use the belt on the engine, hide in the closet (night has fallen), up (9.30pm), go to forward deck, hide behind the fish boxes, wait, wait, wait (11.59pm) wait (all the persons came), wait for them to go down (0.33am), down, listen at the door, up, hide behind fish boxes, wait until 4.59am, wait for everybody to go away, go to stern deck, hide behind the fish boxes, wait (6.29am), wait until 7.30am, dive into the sea.

Chapter Four

Go to department 7, wait, wait, hail cab, follow Agabekov's car, go door, answer 4th, 1st, say 2nd, 4th, 3rd, 4th, 1st, go to 4th door on the right, go door, wait, answer: 1st, 4th, 3rd 5th, 1st, 2nd, 5th, 21st, 2nd, wait, go right door.

Talk to Tsibulenko 4th, 1st, 1st (he runs away), use button, go through the right door in to the cabinet, wait, (Tsibulenko begs you to open the door), wait, wait (10.17am), talk to microphone, ask all the questions you can (especially about nurse Sanyeva and patients!), use the intercom, say 1st, 1st, use button, go left door, move body through left door, talk to Golubev: say 'Saliva', move the body through the left door, go outside.

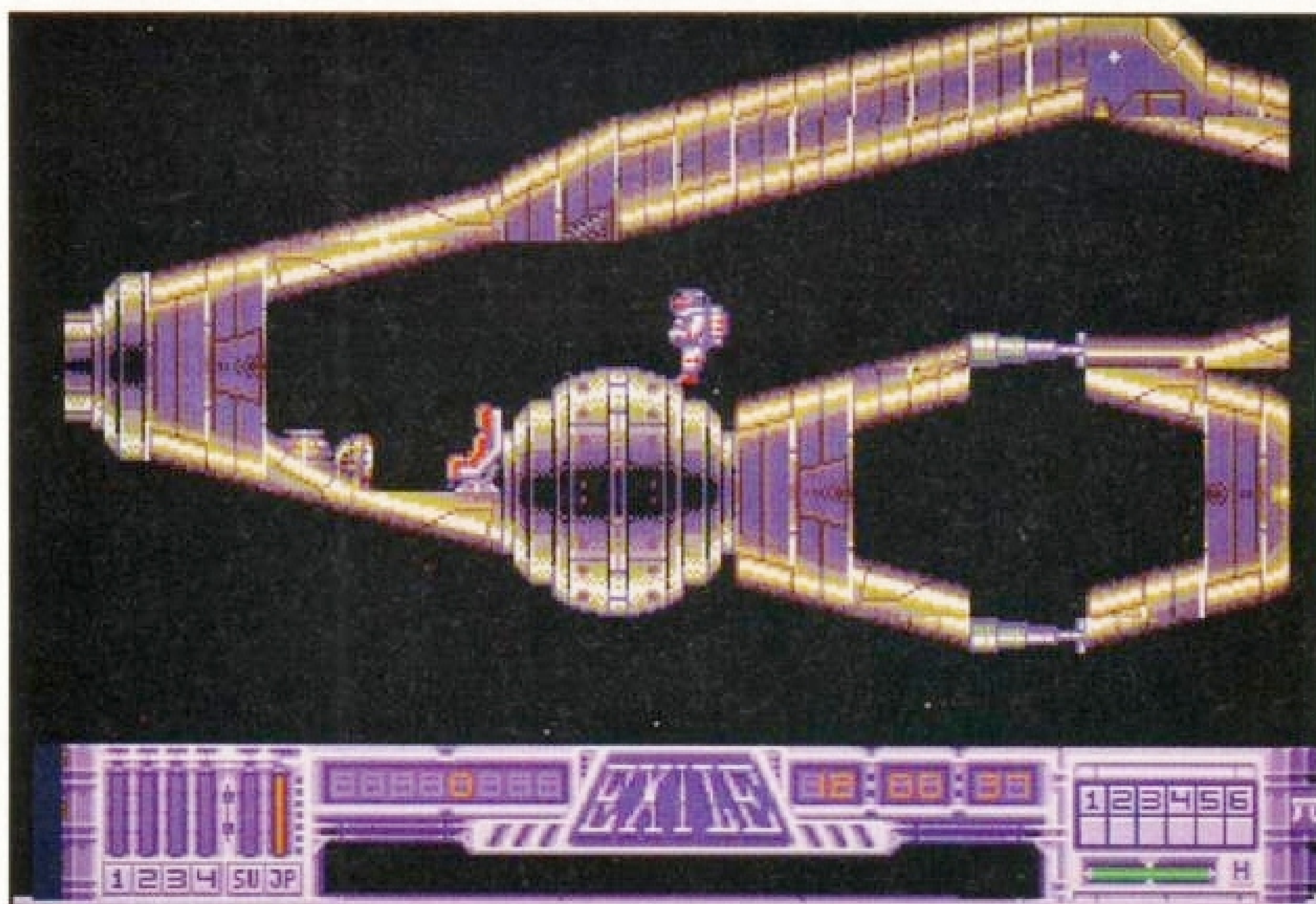
Go through the exit to your hotel, go through the exit to Gorki Street, go door, say 2nd, talk Harry: say 'memory's bible' or 'the book of death', ask about the motherland, go door, go to Great Patriotic War Street, enter, answer 2nd, wait for gallery woman to go around the corner, hide inside the closet, wait, use the lightswitch, go around the corner, inspect desk, get letter opener, inspect statue, get sword, use letter opener on statue, go door, tell dazed man anything. Answer 2nd, 1st, wait, wait, answer 2nd to Uncle Vanya, when Yegor hits Vovlov, take the gun and shoot Vovlov. THE END.

A big hand goes to Daniel Platt of Liverpool for furnishing us with that solution.



Oi mate! Wanna buy an early copy of *Amiga Format*? Not even the subscribers have their version yet. It'll only cost you a pair of Levis.

EXILE



Exile – a tremendous game but one that's going to take you ages and ages to finish unless you're using the fabulous tips supplied below. This is my SuperDeluxe Interplanetceptor XR12i.

Here are a few hints and tips to help you on your way:

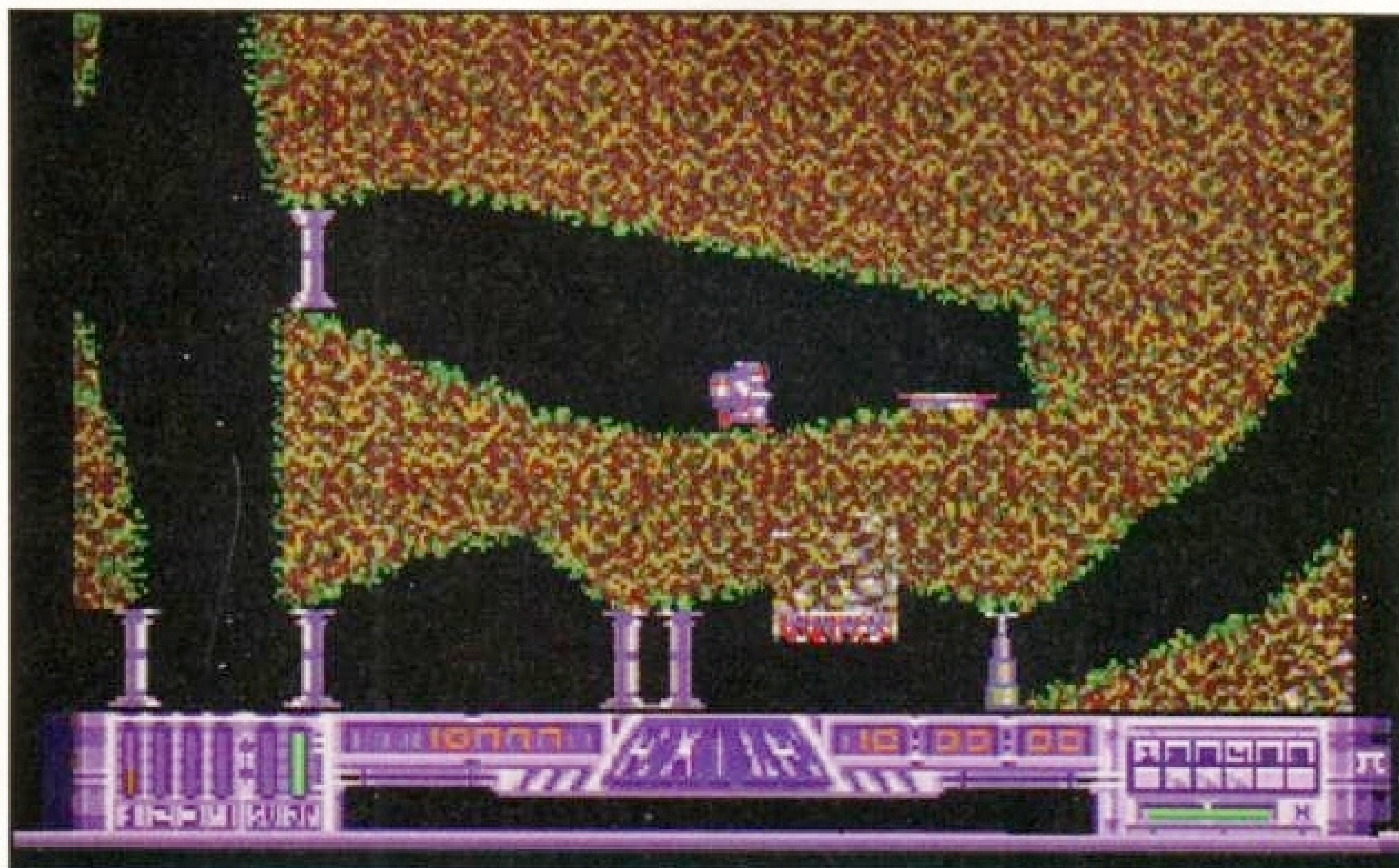
At the bottom of the Great Cavern, where you first meet the troublesome imps, is a door which leads to an otherwise remote area of the cave system. The glowing creatures that inhabit this area are easily disposed of with a few shots from the icer. Travel up from here, past the first door to the uppermost ceiling where there's a gap.

If you push Fluffy into this gap and stimulate him with a volley of buckshot, he will activate the button in the room adjacent. The button activates and deactivates the turrets above and below in the other chamber, allowing safe access. In addition, the transporter above to the east will be turned on and conveniently, it also prompts an energy pod to fall into the immediate area.

The second whistle required to control the friendly robot is in the chamber below. On the ceiling is a menacing gun turret but thankfully the switch will deactivate the turret allowing you to travel safely into this area. The whistle can be gained, again using the resourceful Fluffy. Throw him through the gap from the watery pool and try to shoot him behind the whistle – he will then push it through. Shoot Fluffy as much as you like because he's almost indestructible.

Beyond the Great Western Door and to the west is an area which can only be accessed if you have the fire-protection suit. This is unhelpfully placed in the sizeable grotto down to the east from the Great Western Door. In this cavern are numerous invisible birds, so before entering get the friendly robot to help you. When inside, use the flask to catch a drop of water from the ceiling and head east. Just before the inferno go down to where you will find a single fire blazing away. Use the water to douse the flame and squeeze yourself into the gap to retrieve the fire-protection suit. From here, fly up to the ledge above where there

Continued overleaf ➡



Ho ho! Is this a teleport I see before me? You can't fool me with your 'stand on this and I'll whisk you away to delightful areas of the maze you haven't seen before' ploy. Oh ok, I guess you can then.

HELPING HANDS

FANTASTIC DIZZY

Please help me. I'm stuck in Fantastic Dizzy. How do I get onto the platform with the hook in the treetops? How do I get to Grand Dizzy's Hut and how do I free Denzil?

Tanith Davenport
Bolton

Here we go Tanith: Near the top of the treehouse there's a ledge which is slightly too high to jump on to – it's the one with the hook at the end of it. Just below this ledge you will find a one tonne weight which can be attached to the hook to pull down the ledge making it possible to continue up the trees.

Grand Dizzy's key is in the meeting hall above Dizzy's Hut. The elevator near Grand Dizzy's hut must be turned on and the key for that is just inside the mine entrance. Grand Dizzy is ill in bed and needs you to make some medicine for him. The recipe is in his room and you can examine it. You'll need a Star Plant which can be found just below Grand Dizzy's hut, the mushroom which is next to the mine entrance and an empty bottle which is also very close to Grand Dizzy's hut. Throw these three ingredients into the cauldron in Grand Dizzy's room and give him the full medicine bottle which comes out of the cauldron. In return for curing him, Grand Dizzy will give you a Golden Dragon Egg.

Denzil was hit by a Freeze Spell while he was out swimming, he has now been brought back to his hut but needs to be thawed out. This can be done by putting the pile of straw, which can be found near Denzil's hut, underneath him and lighting it with the match found to the left of the leprechaun. When Denzil thaws out he decides he won't be swimming anymore and gives you his flippers.

LEISURE SUIT LARRY II

Lorks! I'm still stuck in *Leisure Suit Larry II*. I'm on the desert island but can't figure out how to get off it. Any chance of some help?

Martin Evans
Exeter



Leisure Suit Larry, the only man who's slimier than Andy Smith in a nightclub on a Friday. And just as successful with women too.

From your inventory list Martin, I don't think you're on the desert island at all! I reckon your at the Tropical Resort (the one with the beach?). So here's what you should do: Go south to the dense jungle. The machine will take over from here. When you're directly beneath the parrot in the palm tree, take the flower. At the restaurant speak to the man. Sit down in the chair. Wait while everyone has been seated.

*Walk to the buffet near the south west corner of the room and take the knife and then leave. In the jungle, type 'Take clothes off' or 'Take short-cut'. In the guest room walk to the night stand and take the matches. You can, ahem, *make love* to the maid – but make sure you save the game beforehand as you might want to come back and try that again. Ahem. Walk to the bathroom and take the soap and leave the room. You will arrive at the barber's shop. Sit in the chair and become a blonde. Leave. At the beach, walk west to the nude beach. Take the bikini bottoms from the rock.*

Continued overleaf ➡

Go back to the dense jungle. Leave the restaurant. In the guest room walk north to the window then east until you are completely hidden, then change clothes and put soap in the bikini top. Leave the guest room. At the barber's shop, sit in the chair and get waxed, then leave the shop. At the beach walk past the KGB agents. Follow the path around the cliff and when you get round the last corner wear your leisure suit as soon as possible.

MONKEY ISLAND 2

Help! How do I get the last piece of map on Scabb island?

Steven Murray
Liverpool



Right, take the ship back to Scabb Island and head for the cemetery, use the crypt key on the crypt, read quotes from famous pirates, note the quote for Rapp Scallion, look at the coffins and match up the correct quote and then open the coffin. Get the ashes and re-visit the voodoo lady. Pick up Ash2life jar (just to the right of the skull) and you can now ask her about it. Go all the way back to the crypt again and use Ashes2life on Rapp's ashes.

Say you will check out his gas and then walk to the house by the beach, use the key he gave you and use the knob on the stove to switch it off. Return to the crypt. Use Ashes2life again and tell Rapp you've switched off the gas and you'll now get the last piece of map.

LEND A HAND

If you're having trouble with a particular game or have a solution to a question printed in the magazine, don't keep it to yourself, write it down or send it in on a disk and we'll do our best to print it.

HELPING HANDS
Amiga Format • 30 Monmouth Street
Bath • BA1 2BW



With my super jet back pack and gun that fires unfeasibly large bullets, you are no match for me you evil fiend Moriarty.

seems to be an impenetrable barrier of electrifying waves. Drop the flask down into the flak – this will temporarily stifle the flow allowing you to travel down into the hollow.

Take the plasma gun and use it to destroy the gargoyle head that produces the electricity. From this point, travel back to the pool below the Great Western Door and fly head on into the plasma stream that the other gargoyle is producing. Again, use the plasma gun to destroy the gargoyle head and then fly down. Carefully navigate your way down into a windy expanse and strive westward into the niche containing the button. This will close the doors east of the clam at the bottom of the pit. Teleport out. Proceed back to the tunnel leading to the windy recess and take the western tunnel above. Eventually you will stumble upon another blustery area where a pink clam is fixed to the ceiling. Collect the blaster and destroy the hive that it was fixed to and the pink clam will cease sucking.

Go up and west and at the intersection head upwards to the east where you will find a snail. Take the snail down, back into where the pink clam is and fly with it past the green clam to the garden of flowers below. Put the snail in the flower patch and it will start to eat them which will halt the fierce wind they produce. Now you must find the friendly robot who will help you through the patch of hallucinogenic mushrooms. Once you're through, destroy the rabbit (otherwise it will explode) uncovering the clam in the rocky depression below. Take the bottom passage to the east after you have killed the birds and fly down through a windy gully to a narrow passage which leads to a chamber enclosed by three consecutive stone portals to the west. The turret to the east is very useful indeed because it can be manipulated to destroy the portals. Below is another room inhabited by a green clam, which you need not enter until you have the cannon RCD. Head into the large system of caves to the west to find a keycard located in one of the tunnels.

Derryn Hazelhurst
Orkney

CIVILIZATION

Fancy some extra cash? Jonathan Tooley from Loughborough did! When you've got a big kingdom and your payments are higher than your income, go to a city with very high resources and purchase an improvement which costs a lot of money when sold. Keep investing resources into this improvement and when it's built sell it and repeat the process. After a while you should have thousands of pounds!



Look at that! I didn't even know we had a statue and all the time I've been living in the shadow of this colossus. Well I never.



Finding a good spot to build a housing estate has been a headache for councils since time immemorial. Even in the olden days look.



The peasants are revolting. Groan. Ok, look there are these two dogs in the vets and one says to the other 'what are you in here for'...

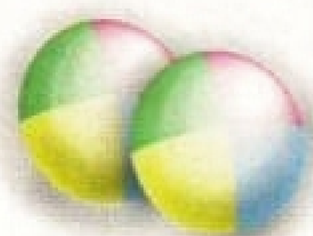
PREMIER MANAGER *Three*

Graham Banner from West Kirby sent us these two phone cheats for you to play with:
400040 = fitness and better morale
343343 = more money



PD select

Make learning fun with a selection of educational packages for kids, plus a beginners guide to the Amiga and a final offering from Vark.



BIG TOP FUN / WORK & PLAY

By....................*Sparx*
Ware.............*Licence*
PD Library........*SeaSoft*
No of disks..............................*Two*
Price....................................*£4.00*



BIG TOP FUN: **Four games designed to make learning fun.**

This month has seen an explosion of educational titles and to start we've got this *Word and Pictures* suite of four games. The games are all set in a circus with big, bright colours and simple, yet entertaining animations.

Word Balance is a fairly easy game suitable for children beginning to learn how to read. *Matchplay* is a 'pairs' game, which should be familiar to most kids. It starts with matching pictures and develops on to words.

Seal-A-Grams is designed for children who can already read. Balance the seals by moving the letters into a word. If you get stuck then a picture will give you a clue.

Finally, *Balloon Burst* is again aimed at children who can already recognise words. They also need to have reasonably fast reactions to shoot the balloons – the clowns move quite fast.

This suite is an excellent learning tool – particularly for children who have problems reading or need to improve their skills. The menus are simple and effective and the graphics are excellent. The package costs £4 but if your child needs help learning to read then this is a small price to pay, and the next disk is also included.

WORK & PLAY

Much like the *Big Top Fun* disk we have just reviewed, these are games to aid learning. The program also has a simple menu and lots of colourful pictures combined with some superb animations.



BIG TOP FUN: **Well it's definitely not a carrot.**

Funtimes Tables is an aid to learning those dreaded times tables. It's set out as a board game, for one or two players, and if you land on one of the starred squares you have to answer a question to continue. Competition is a good way to stimulate learning and this could be an ideal way for kids to grasp their times tables.

Let's Go Shopping again, requires the child to answer

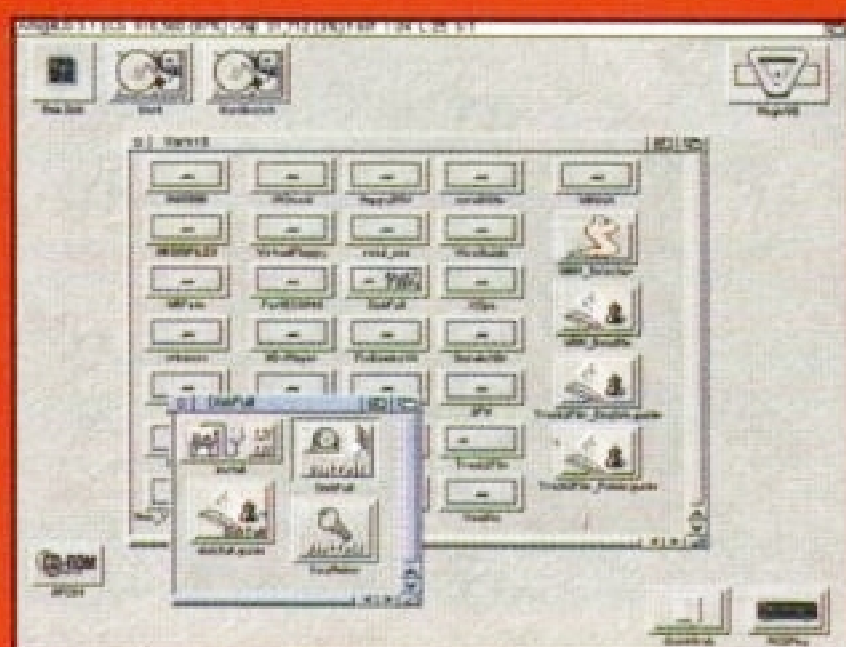
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PD selection of the month

VARK 15 – FINAL RELEASE

By..*Vark*
Ware...*Free*
PD Library................*Roberta Smith DTP*
No of disks.....................................*Two*
Price..................*90p per disk + 50p p&p*

It's a sad day for the Amiga when we lose yet another enthusiast. Vark has released 15 disks always containing the best in PD and Shareware releases. Now he has decided to sell his Amiga and enter the world of crashes and breakdowns – the PeeCee arena.

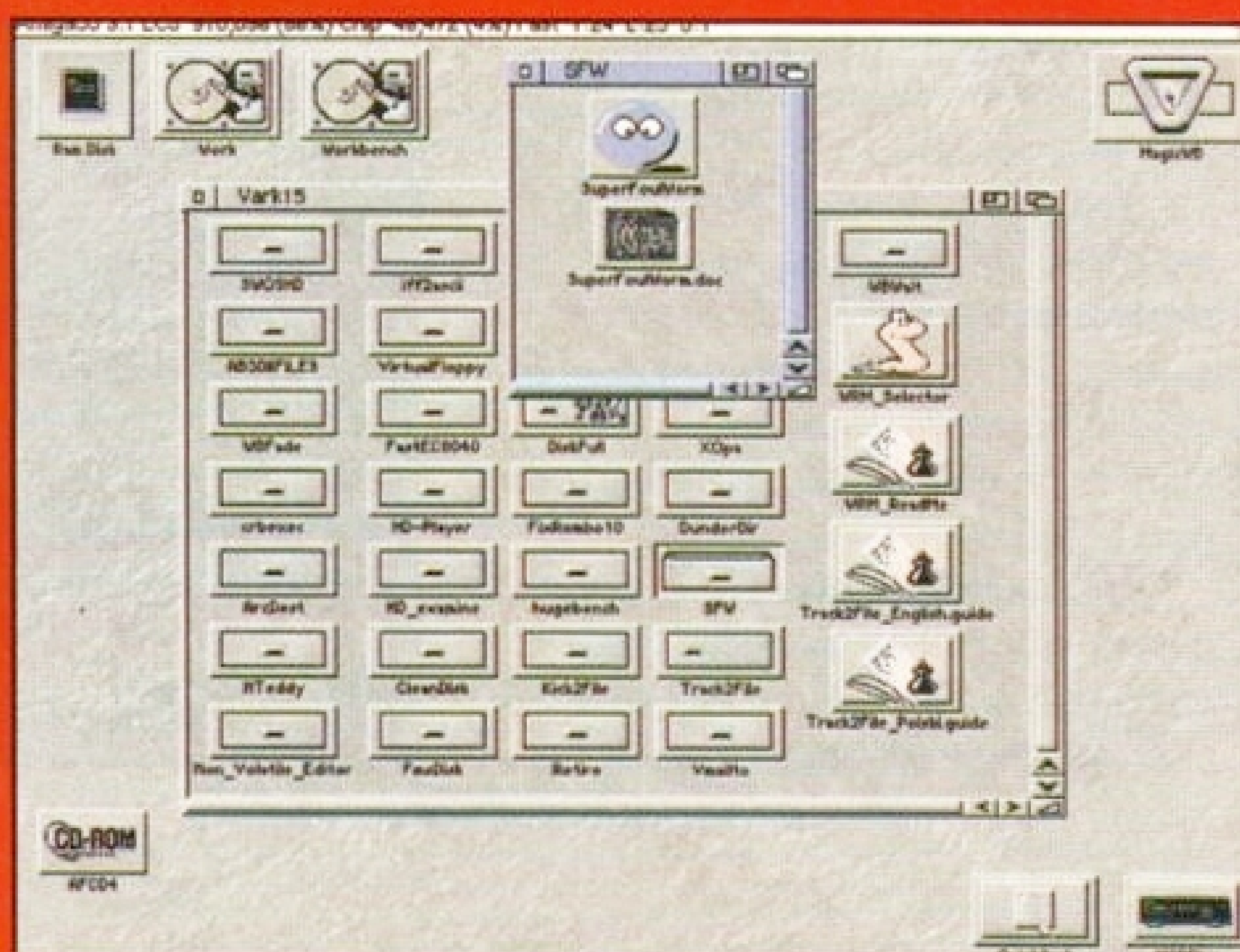


DiskFull **has been around for some time but this new version offers several enhancements.**

Enough of that, does this last disk live up to the previous 15? Well despite committing mutiny this is, again, an excellent disk. As always with Vark collections there are masses of utilities, packed onto two disks,, ranging from a *SWOS* hard disk installer to an IFF to ASCII converter.

The programs are all lha archives and a Commodore installer allows easy unpacking. There really is something here for everyone, whether you're a games player or a programmer. The highlights are the excellent hard disk installer for *SWOS* (that really works) and a program that stops archive CDs putting everything in RAM:.

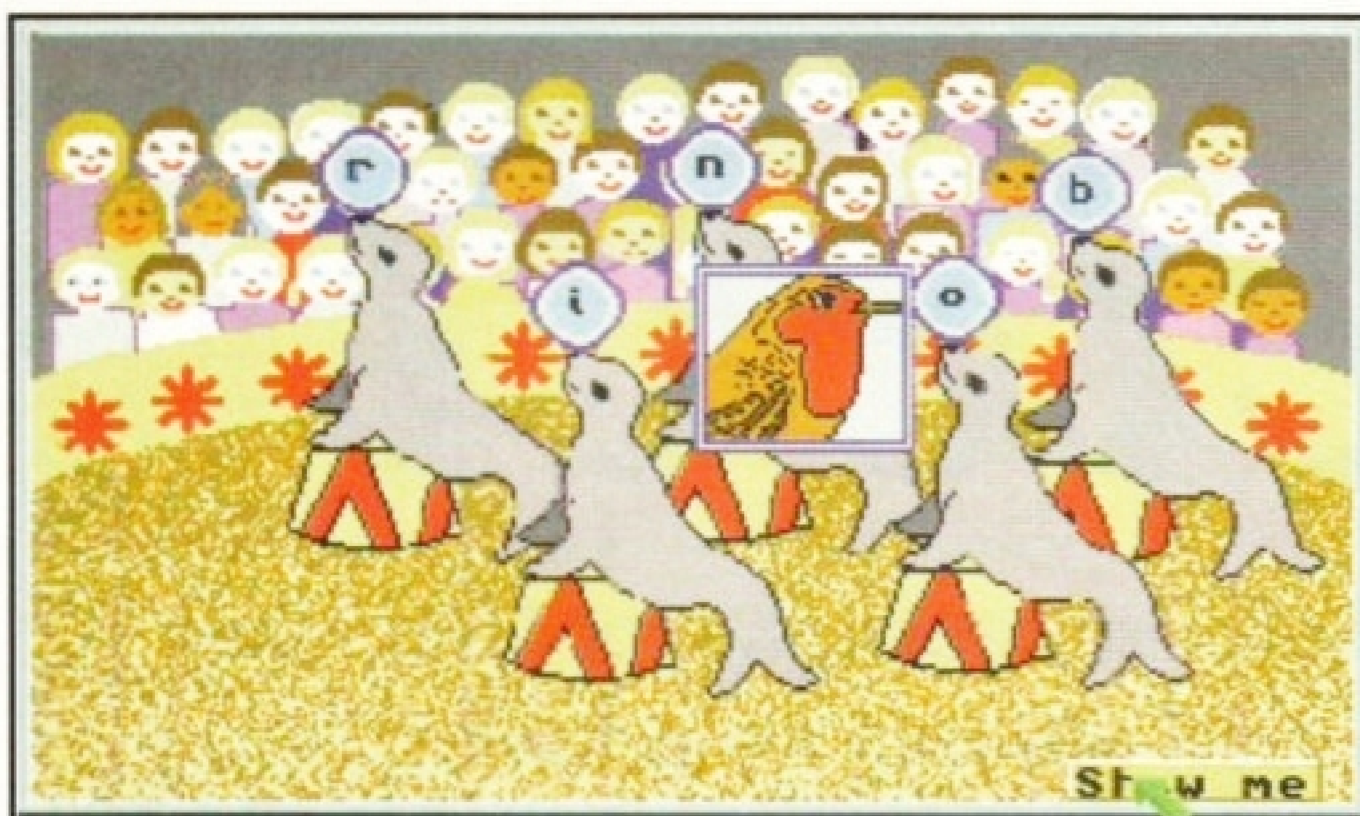
The *HD-Player* program allows you to play long samples from hard disk, there is a new replacement AmigaGuide program, a program to create a massive Workbench, a utility for copying your Kickstart to disk and there's even a virtual teddy bear!



If you want loads of new programs to fiddle with then this is for you. But if you have little, or no knowledge, of AmigaDOS then most of the programs won't be of much use and you may even have trouble installing them.

A hard disk is also useful as there are so many programs.

Vark says farewell to the Amiga with a host of useful utilities.



BIG TOP FUN: ***Seal-A-Grams*** **is designed for children who can already read – if you're having problems with the word then a picture should give you a clue.**



WORK & PLAY: **Work your way round the board in** ***Let's Go Shopping*****.**



WORK & PLAY: **Click Clock rewards correct answers with an animated mouse sequence.**

questions, this time given by a shopkeeper. He asks things such as "pears cost 30p, how many can I get for £1.50". This is not as good as the first game because there isn't much of a game to play and a child could soon stop paying attention.

Click Clock is a time tutor which allows you to learn either analogue or digital clock displays. The aim is to set the clock according to worded prompts, such as "set the clock to twenty-five to ten" and it's a very good way for a child to learn the time. The reward in this game is an excellent little animation of a cat chasing a mouse. This disk comes with the *Big Top Fun* package and together they are excellent value.

PAINT, PASTE AND DRAW

By ....*Simon Hitchen*
Ware.................................*Licence*
PD Library ....*Seasoft*
No of disks ....*One*
Price *£3.50*

This is another title aimed at younger readers but this time it's more fun than educational. *Paint, Paste and Draw* is a simple art package, with the backgrounds and various brushes provided. The task is to make up your own pictures. It is, basically, a computer-age colouring book, with transfers. First of all you make up the image, using the built-in brushes, your own, or freehand art.

The interface is astounding, everything scrolls on very smoothly, and there are many excellent touches such as the animation of a chap putting a disk into an Amiga when the disk is accessed.



The quality of the drawings are excellent, with big, easy to colour pictures and equally well chosen colours. This is really only suitable for children aged seven or up, as you need to be able to load, save and edit your creation.

This package costs £3.50, but that's a good price for such a well-presented product that could keep a child occupied for hours. This is ideal for all those parents who wish their children would be more productive.

SOUND & ANIMATION STATION

By ....*Simon Hitchen*
Ware.................................*Licence*
PD Library ....*Seasoft*
No of disks ....*One*
Price *£4.00*

From the same author of the previous package comes another remarkable program, designed to produce simple, but smooth animations. Again aimed at older children, this comes complete with examples, pre-drawn backdrops and a variety of animated brushes.

By using the simple point and click system you can quickly create an animation, without the hassle involved using a package such as *DPaint* or a more advanced animation engine such as *MainActor*.

There are disadvantages, such as the inability to perform more complex effects on the sprites, but this is of little worry to a first time user. One problem I found was the long introduction sequence that cannot be skipped, this becomes annoying when you have to wait on each load. You would expect a package like this to come with an installer.

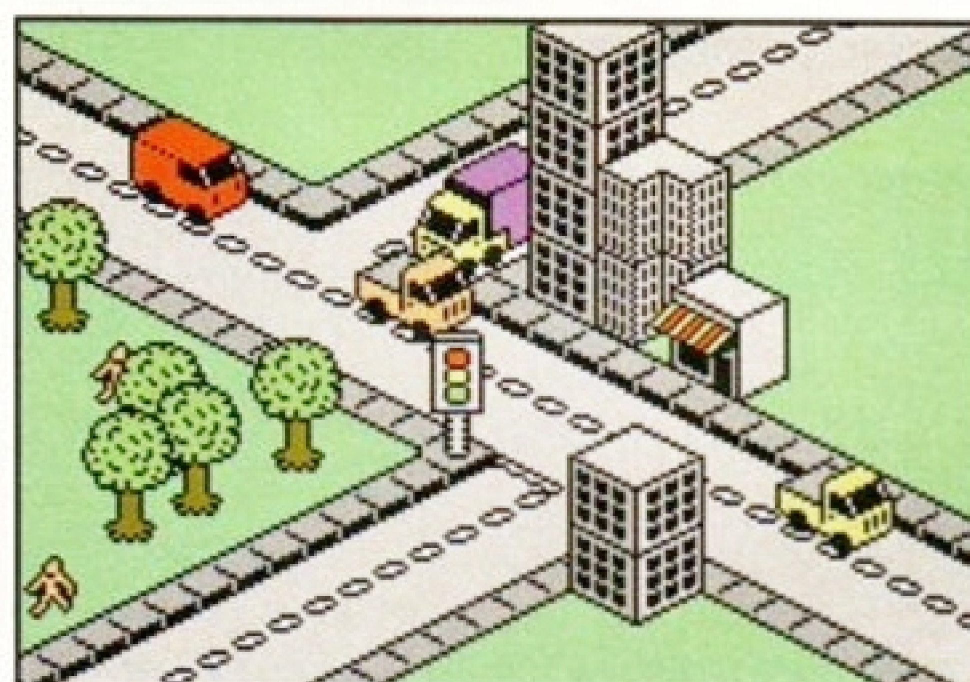
If you wanted to work on a project over time the disks are slow, and you could lose interest but for just £4 this represents good value and it's an ideal accompaniment to *Paint, Paste and Draw*.

AMIGA ASSIST!

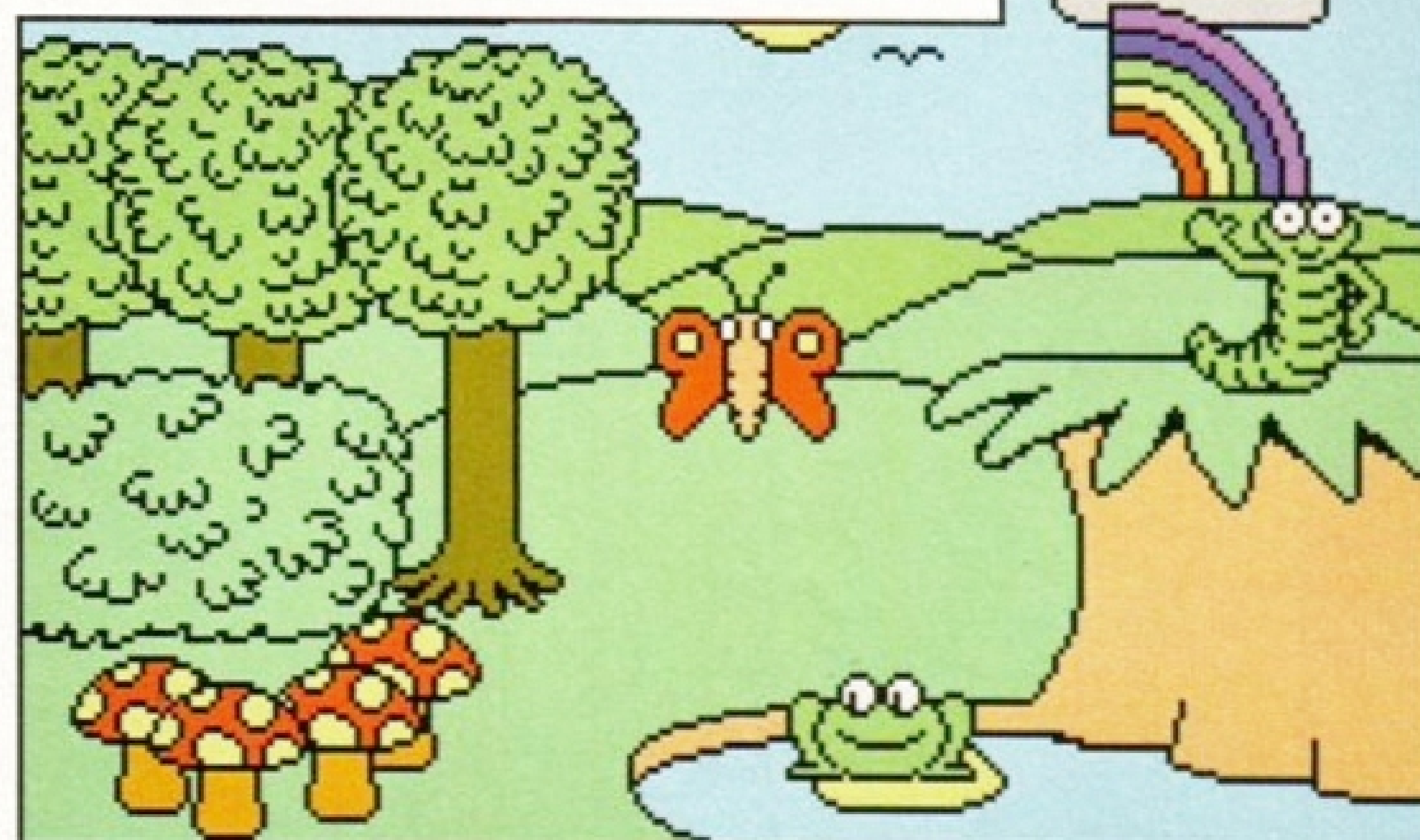
By...........................*J.R. Cumming*
Ware.................................*Licence*
PD Library ....*5th Dimension Licenceware*
No of disks ....*One*
Price......................*Refer to Library*

This is a beginners disk designed to show less experienced users the ins and outs of the Amiga. As the author acknowledges, the documentation from Amiga Technologies is not easy to follow and this disk is designed to rectify this.

The program uses a simple, well presented point-and-click interface. There are 15 topics available, ranging from descriptions of the Amiga range



PAINT, PASTE AND DRAW: **It's no Picasso but there's plenty of room for children to get creative.**



PAINT, PASTE AND DRAW: **Say Hi! to Harry the friendly caterpillar.**



SOUND & ANIMATION STATION: I could have gone for this colourful swirling backdrop...

...but instead I opted for this attractive Egyptian scene for the animation.

and the speeds of computers to DOS commands and upgrading.

Pictures accompany the documents and you also have the option to print them out. There's a comprehensive help screen, explaining the interface in great detail which gives an excellent introduction.

The documents are obviously written by an enthusiast and cover every aspect of the computer, allowing you to understand CD-ROMs, printers, memory, upgrades and many other topics.

DOWNLOADER 2

By ....Ernest Ruckle
Ware ....Free
PD Library ......Roberta Smith DTP
No of disks ....One
Price..........90p per disk + 50p p&p

When I received this disk I couldn't believe the document that accompanied it was produced with *ProText*. Usually they are simple and text based, not the well laid-out professional-looking documents, that belong with a desktop publisher.

This disk contains 39 fonts that can be downloaded to any EpsonQ-compatible 24-pin printers. With these printers, and the driver provided for *ProText 6* you can use these professional-looking fonts. If you don't have *ProText* then don't worry because there's a program with the package that includes an integrated font and style system.

The main program is quite complex, and could leave a beginner baffled, but after using it for a few minutes you realise that it really is excellent, allowing you to unpack, view and use the fonts.

There is also an ARexx interface provided, with 137 commands, so you can use the fonts with any ARexx-compatible text editor or word processor.

A novel typewriter mode gives you the option of turning your printer into a modern electronic typewriter or an antique Underwood upright.

Finally, the ability to load any other DL2-format font means you can build up your own collection. For the cost of a disk this is unbeatable value – it could be the ultimate low-cost solution for word processing and DTP.

THUNDERDAWN

By ....Andrew Campbell
Ware..................................Licence
PD Library ....5th Dimension Licenceware
No of disks ....One
Price £2.95

There have been demos of this game around for ages and finally the full version is here. The demo was PD Selection of the Month (AF88) and I'm equally impressed with the full game.

This is a role playing game in the *BlackDawn* series, written by the original programmer, Andrew Campbell. It's ideal for all RPG freaks. The author says that it "...takes the usual elements from RPG games and piles on the dark fantasy atmospherics", and the game does create an excellent atmosphere.

There is no real storyline, except that you are a warrior trapped by some force and you have to collect crystals by killing loads of bloodthirsty hydras, phantoms, zombies, and other ugly big *Evil Dead*-style monsters.

The author admits that he created this game for fun, never intending to break any new boundaries. The movement isn't particularly fast, but this isn't essential and it is, importantly, playable. The game oozes atmosphere, from the dark and hazed graphics to the melodious moans of sound – this is fantasy adventure mixed with horror, and the monsters certainly pack a punch!

If you're looking for *Eye of the Beholder* or *Doom* then forget it but if you want fun with blood, puzzles and good graphics then play on!

TOP 10 PUBLIC DOMAIN TITLES

Top 10 courtesy of:
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PO Box 672 • South Croydon • Surrey • London • CR2 9YS • ☎ 0181 657 1617

1	New Icons Package v3
2	New Icons Backdrops 1
3	MUI-USR v3.6
4	Everyday Organiser v2.01
5	Megaball 4
6	Boulderdash
7	Cheat Collection
8	Virus ZII v1.34
9	AGA Magic
10	Amy WB2

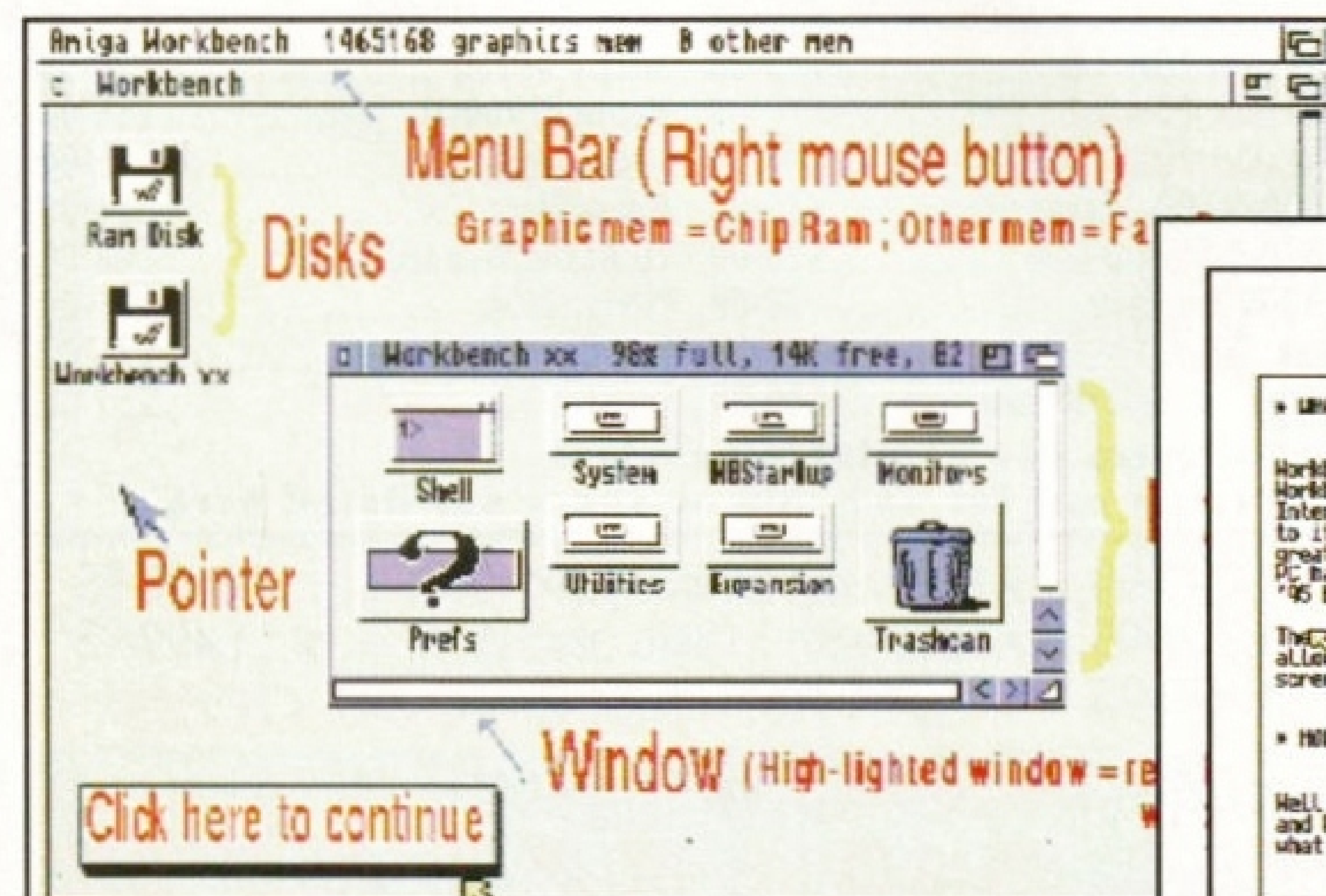
WHERE TO GET THE DISKS IN PD SELECT THIS MONTH

SEASOFT
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Courtwick Lane • Littlehampton
West Sussex • BN17 7RN
☎ 01903 850378

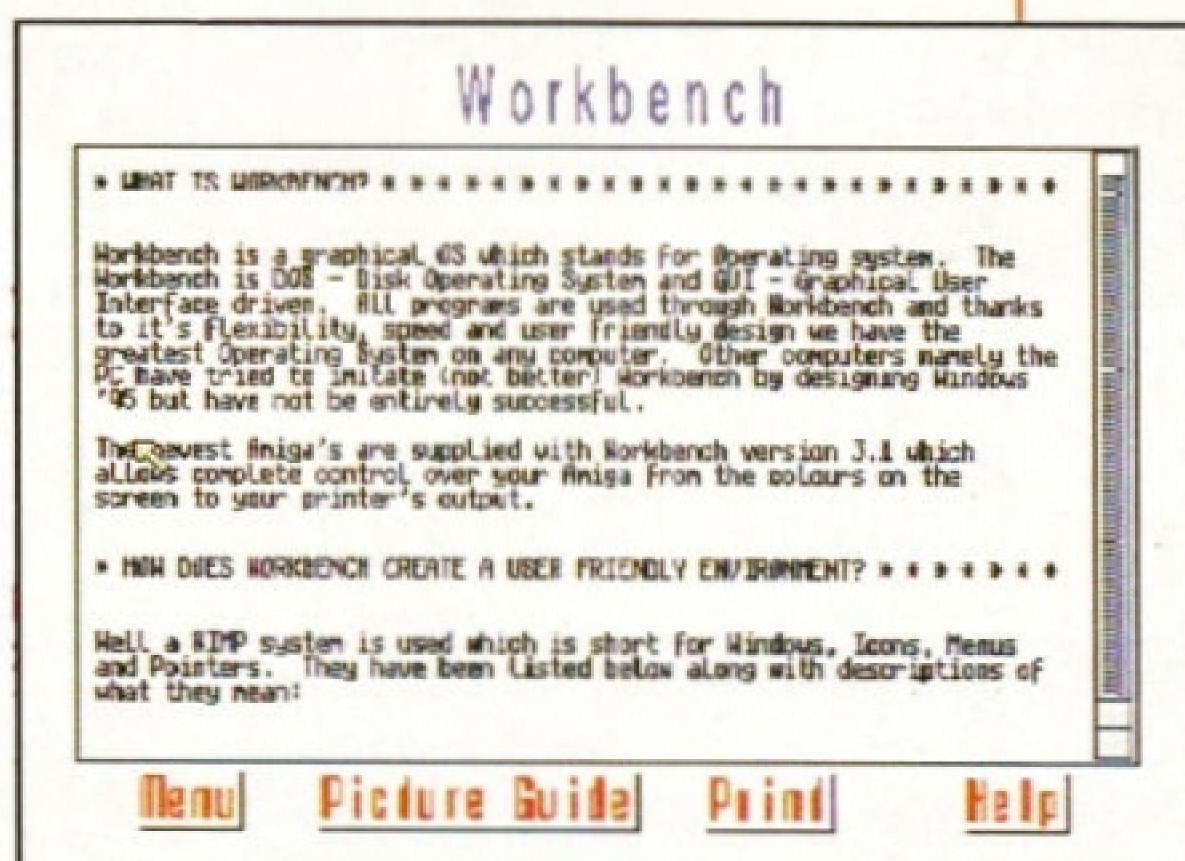
5TH DIMENSION LICENCEWARE
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Rotherham • S63 9BY
☎ 01709 888127

ROBERTA SMITH DTP
190 Fallodan Way
Hampstead Garden • Suburb
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Other good PD libraries



AMIGA ASSIST!: Accompanying pictures make learning much easier. This diagram is a beginners guide to the Amiga's Workbench.



AMIGA ASSIST!: Reading through all the copy could get tedious but if you want to learn about the Amiga it's worth persevering.

AF SERIOUSLY AMIGA



Uh oh, now you get to see me in all my dubious glory! Still, worse things happen at sea, for instance mutiny, scurvy and shipwreck, but since that has absolutely nothing to do with this month's serious reviews section, we'll dwell on it no longer.

While this month sees a tentative mention of the Amiga from web giants NetScape, we review the Amiga's second commercial browser – AWeb-II to see if it measures up to the current competition.

CD drives also seem to be more popular than the software to run on them at the moment. We have a new 8-speed IDE CD-ROM drive for you to peruse at a very attractive price.

As you know, it's Christmas time yet again, and what would Christmas be without the usual round up of things to give your loved one (i.e. your Amiga) as presents? Have a look on page 64 for some inspiration.

Last, but not least, because I spend a lot of time listening to readers' views, I have noticed a good deal of 'demands' that this or that company port its software to our platform. It's not just serious applications like NetScape either, a lot of people also want games. The answer, is to contact the companies creating this software and ask them for an Amiga version!

AMIGA FORMAT'S REVIEW POLICY

is very simple. *Amiga Format* is staffed by some of the most experienced Amiga users in the world and what we say goes. OK?

WHAT OUR REVIEW SCORES MEAN

90+% The crème de la crème. Only the very best, most versatile and effective products are awarded an *AF* Gold – the most highly prized rating there is.

80-89% These products are very good, but there are minor flaws or areas that could be improved upon.

70-79% Good products which may be worth buying, if you have a special interest in that area of computing.

60-69% Average products with somewhat limited features and appeal. Products in this category tend to be flawed.

50-59% Below average products which are unlikely to impress your mates or your wallet. Avoid.

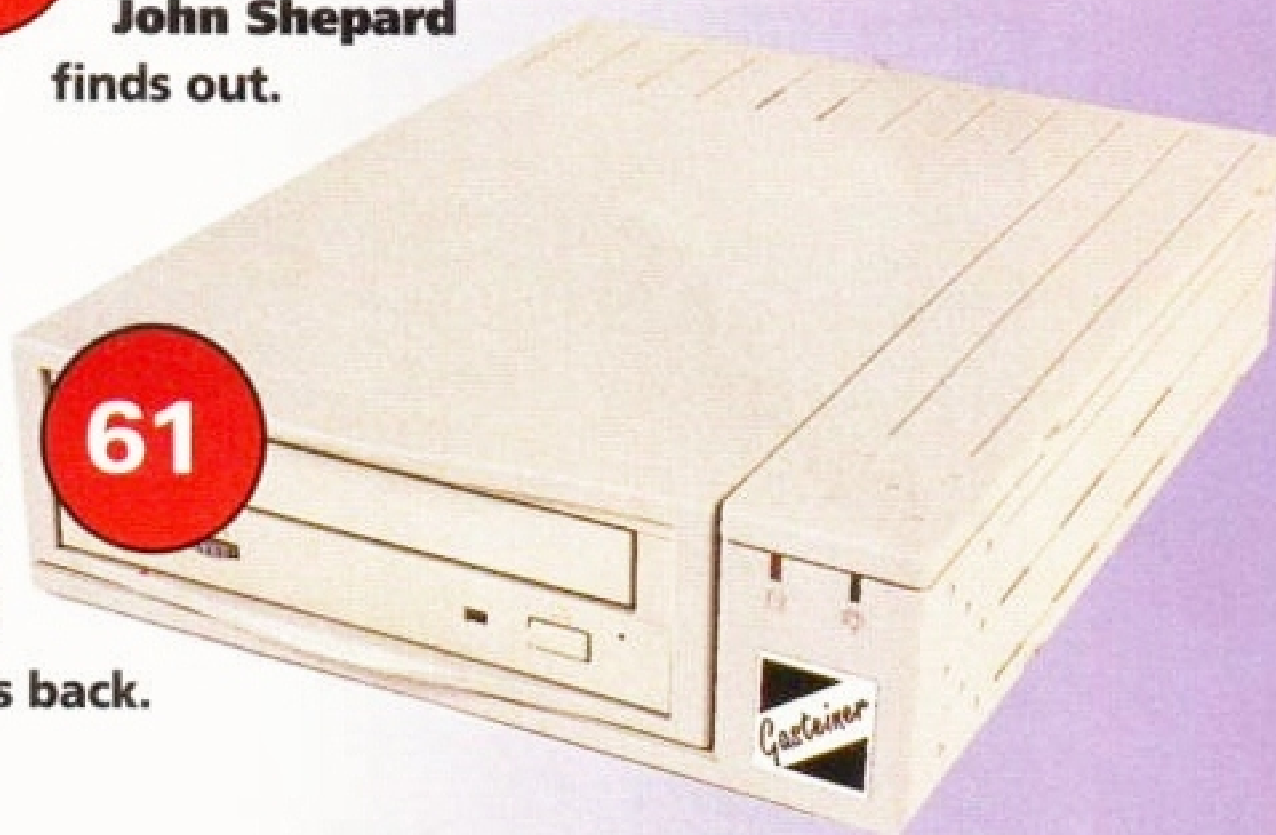
40-49% Overwhelmingly poor quality products with major flaws.

Less than 40% The absolute pits.



AWEB-II

We didn't think it was very good when it was a Shareware title, even though it was the fastest Amiga browser around. Has its commercial status changed matters at all? **John Shepard** finds out.



EIGHT SPEED CD-ROM DRIVE

Vroom, vroom. CD-ROM drives come of age with this speedy IDE number from Gasteiner. **Ben Vost** plugs one into his A1200 and sits back.

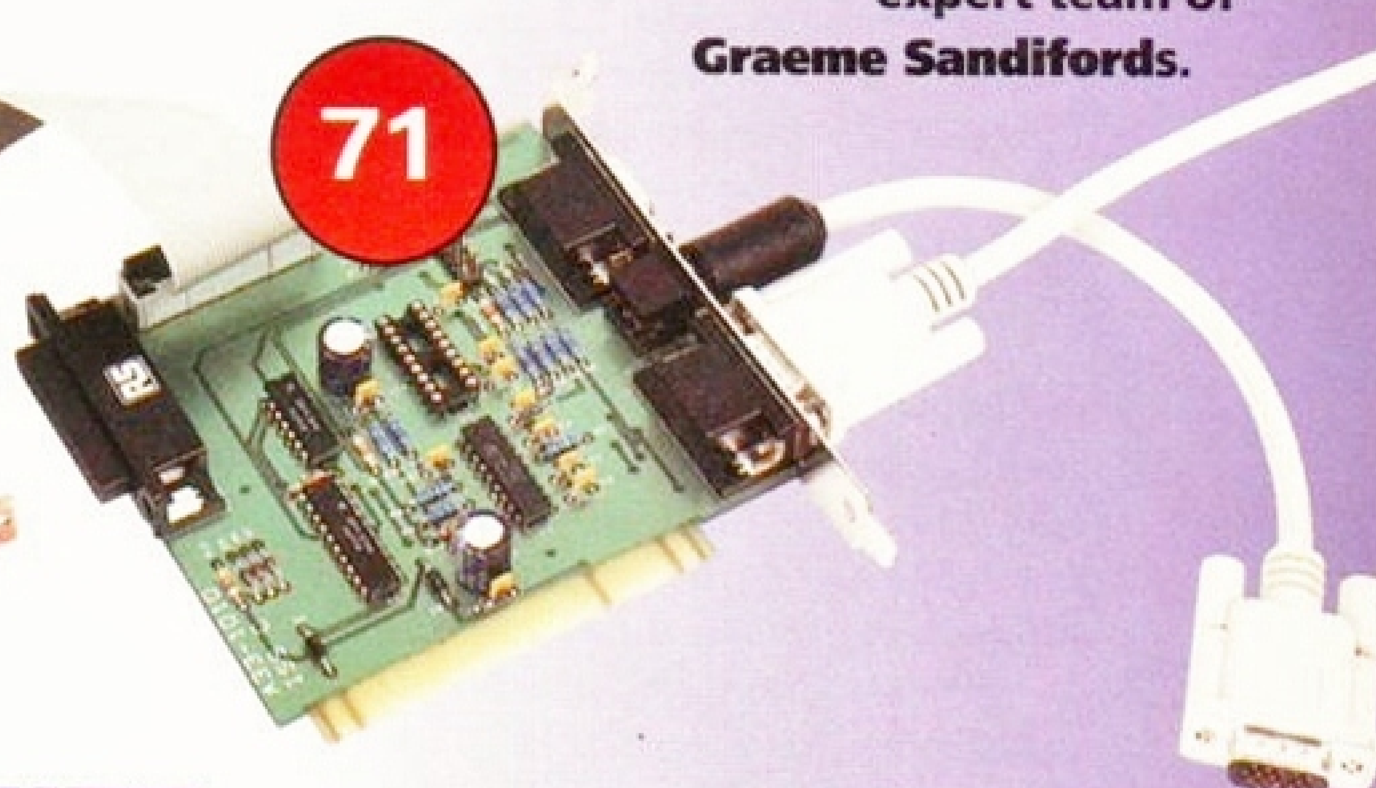


STOCKING FILLERS

Christmas time is here again and not everyone can afford to buy their loved one that 17" monitor they were after. Here's a selection of nice bits that won't hurt your pocket too much.

WORKBENCH

CD[32] problems, printer queries, keyboard failure, you know, the usual festive problems laid to rest before Christmas Eve by *Amiga Format*'s expert team of **Graeme Sandifords**.







AMIGA.NET

Princess Leia is our special guest star on the Amiga Internet page that boldly goes and seeks out strange new life and new civilisations. Hosted by the sour milk-drinking man with the pointy ears and a light sabre **Darren Irvine**.

AWeb-II



Read more of the authors work on the CD

AFCD8:Look_here_1st!/AF_on_the_web/

The popular Shareware Web browser has gone commercial. But can AWeb-II keep up with its competitors? John Shepard endeavours to find out.



Nice-looking page. Wonder whose it is?

Back in the beginning there was Mosaic. In those days, a Web browser could add as many niceties as it wanted, but it had to draw Web pages basically the same way Mosaic did. Then Netscape changed the rules. It no longer mattered what bells and whistles a Web browser offered in the way of interface, speed, usage, or whatever – it now had to keep up with those "extended tags" Netscape kept making and people kept using.

And then there's the Amiga. Netscape doesn't produce an Amiga version of its browser – which means we don't get all the coolest new features when the rest of the world does. We have to rely on third parties to write the browsers that deliver the goods.

AWeb-II represents that effort. It made its first appearance as a Shareware offering, giving most of the Mosaic functionality plus a couple of tiny adjustments to keep "Netscape-enhanced" pages from being totally unreadable. A newer AWeb was promised – if you registered, of course – which would have more modern stuff. That newer AWeb has arrived.

The usual Installer script puts AWeb on your hard drive, along with the required ClassAct libraries, the AWeb mail and FTP plugins and the documentation (all written in HTML – so you read the documentation with AWeb itself), and then asks you a few questions such as what size you want your on-screen fonts to appear.

"AWeb isn't a bad program by itself. It does what it says it does, it has a few nice features. I never saw it crash and it seems to be kinder to the system than other Web browsers."

Oddly enough, one of AWeb's major features is the fact that it doesn't use MUI (Magic User Interface). Every other Amiga Web browser that I'm aware of – except ALynx – uses MUI for its interface, and while MUI offers some nice features that make writing Web browsers easier, it's slow and uses lots of memory – especially chip memory.

(And if you don't have a graphics card, you're forever stuck with 2Mb of chip, which IBrowse eats quickly!) AWeb uses datatypes, though, which are slow and also use a lot of chip RAM – either way you lose. AWeb doesn't seem to crash in low-memory conditions as often as IBrowse – it just simply shows "ERROR" icons in place of graphics it didn't load.

So the test course? I pointed AWeb-II at the most complex sites I know, sites that Netscape and IBrowse display basically as intended. AWeb displays backgrounds and image transparency just fine. But tables and "aligned" images aren't there. Sites designed for browsers that use these tags can wind up scrambled on AWeb. The new trick of using multipart GIF files for animations doesn't work – it just displays the first or second frame frozen in time. And it won't use the new client-side image maps.

THE FRAMES FEATURE

On the other hand, AWeb-II offers limited "support" for Netscape's Frames feature – a method by which several Web pages can be shown at once. AWeb doesn't actually display the separate pages, but rather the "Your browser doesn't support frames" page you'd normally see with links to the individual frame pages at the top. It's not elegant, but it's better than nothing – many poorly designed sites simply don't work on non-frame-capable browsers.

Aside from the Netscape-enhanced stuff, one thing from IBrowse and Netscape and other browsers that I really miss in AWeb is the "pop-up menu." The principle is this: you click with the right button instead of the left one over a link or image, and up pops a menu of options, like "View this image" or "Save link to disk." (Useful for swiping images from other people's pages... not that anyone would do such a thing.) Some of us like having that 'Save to disk' option handy at a click. To save a link directly to disk with AWeb, you hold down the shift key when you click, it works but it isn't the same.

HTML TRICKS: A QUICK GLOSSARY.

Things were simple until Netscape got into the habit of making up their own standards for the HTML (Hypertext Markup Language) in which Web pages are written.

Here's some recent HTML features and what they do – and what happens when a browser can't handle them.

TABLES

Tables are a nice but complex addition to HTML – you can use tables to arrange graphics and text in seemingly impossible ways. Table borders can be on (for a 3D look) or off (so the table contents seem to float). Tables are supposed to be simple grids of rows and columns, but special attributes let you make table cells stretch across several rows or columns. Pages using this trick become horribly distorted on a table-impaired browser. AWeb does insert a line break at the end of a table row, which helps a little on some very simple tables – but otherwise no tables at all.

BACKGROUNDS

A Web browser can display a background image much the same way Workbench can show a backdrop in a window. The trick is, some people make backgrounds with a big dark stripe down the left and use tables and other tricks to keep all the text out of the stripe. AWeb-II handles backgrounds but not tables, so text sometimes winds up where it shouldn't be.

FRAMES

A Netscape "mean trick" allowing several Web pages to be displayed in "sections" of the browser window. AWeb-II doesn't directly support frames, but it does provide links to each of the sub-pages. This is way better than nothing at all, as many sites do not provide a "no-frames" option.

ANIMATED GIFS

The Compuserve GIF89A format allows for "stacked" images – a single .gif file can contain several images. Originally this was intended for slideshows but someone thought it was a cool way to make Web animations. AWeb does not support these – it loads the whole file but shows only the first image.

IMAGE ALIGNMENT

An image on a web page can be "aligned" or pushed to the left or right of the screen with the text flowed around it.

AWeb doesn't understand this – it will space out the page so that one line of text exists per graphic, meaning carefully laid out pages come out looking dreadful.

CLIENT SIDE IMAGE MAPS

Normally, an "image map" - a clickable image that takes you to different places depending on where in the image you clicked – must go to a remote server to get coordinates.

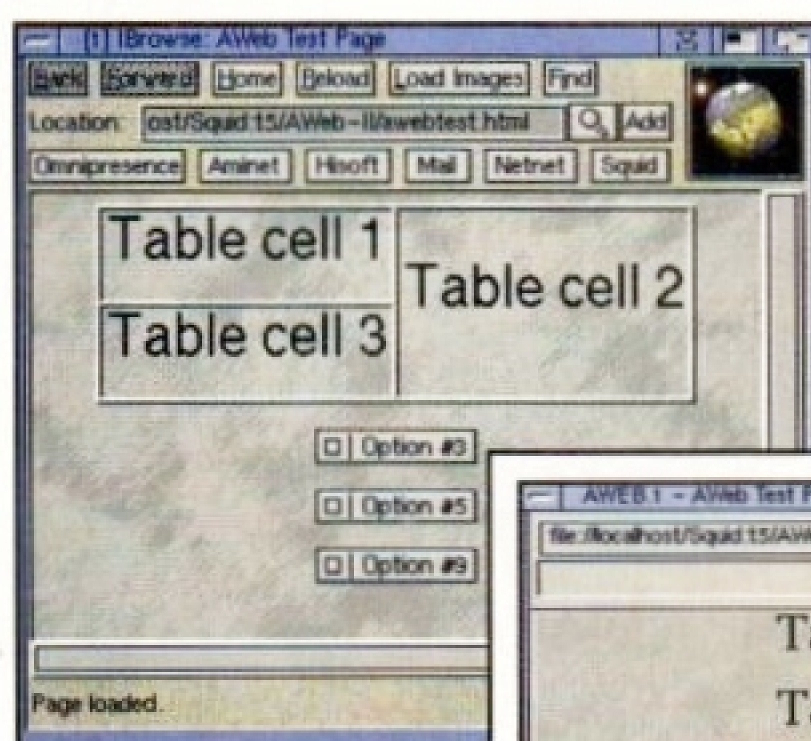
Netscape pioneered a way to make such image maps work on the browser exclusively without calling a remote server – making, amongst other things, inclusion of Web pages on CD-ROMs much easier. AWeb-II doesn't support this, only the older "coordinates" method.

FONT SIZES

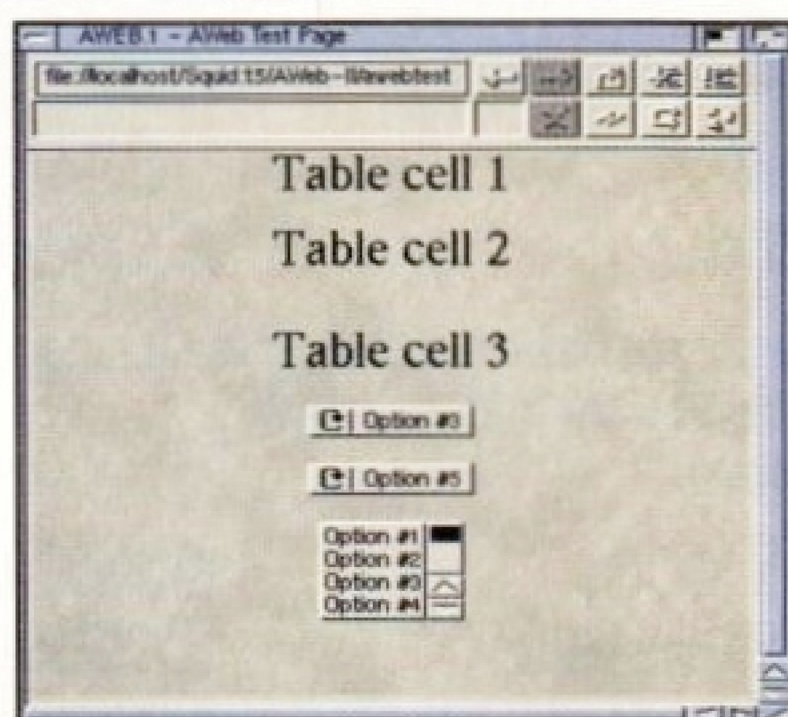
Web pages have two ways of making text different sizes: using a "heading" or a "font size" tag. AWeb supports headings but not font sizes – so pages that mix the two will look very strange.

BLINK

AWeb does not support Netscape's proprietary "blink" tag – thank heaven.



A test page I made, showing tables and form selection gadgets...



...and what AWeb-II did to it.

AWeb has a unique "network status" window, which lists all the files currently being downloaded, and lets you stop one or all of these files. It's handy if you know you're waiting on one particularly large graphic that you don't need to wait for. On the downside, the normal "stop" button disables itself once the page is done and the graphics start loading, so it's a trip to the lightning bolt to make it all stop – and you have to wait for all the files to clean up. It's a neat concept but it could be done better.

HOTLIST

Unlike IBrowse or Netscape, AWeb doesn't keep its hotlist under the "Hotlist" menu. You select "Show hotlist" and it brings it up as links in the main browser window. I hate this. It's counterintuitive and slow. There is a separate Hotlist window you can bring up, called "Maintenance", used for editing the entries, but it all seems sideways to me.

I noticed a few oddities in the way AWeb-II displays "form" elements – those pages asking for information. The "selection" gadgets aren't consistent – sometimes they appear as an Intuition "cycle" button and others as a scrolling list of items. It looks odd on a complex form, to see scrolling lists and cycle buttons mixed. Another thing to watch for is the big text-entry gadget that looks like a miniature text editor – you don't want to edit a large amount of text in there! The scrolling is slow, and there is no way to easily delete large amounts. There is a little "E" icon in the corner, though, which opens up a real text editor and lets you edit there.

AWeb isn't a bad program by itself. It does what it says it does, it has a few nice features, I never saw it crash and it seems to be kinder to the system than other Amiga Web browsers. But it doesn't compare with better ones. IBrowse supports many more Web formatting commands and is easier to use. AWeb-II is very similar to Voyager at this point so the only real thing that AWeb-II has going for it, is lack of MUI.

AWeb is a start – as more features are added, it'll become a browser to be reckoned with. Meanwhile, I just keep saying, "This is a nice page. I'll have to come back with a real browser."

SO WHAT HAS IT GOT?

AWeb supports all the basic HTML 2.0 tags and these extended or proposed HTML 3.2 tags:

- Background images and colour commands (<BODY BACKGROUND= BGCOLOR= TEXT= and so on).
- Alignment tags for paragraphs, headings and divisions.
- Image Border and size tags.
- Enhanced ruler tags (<HR WIDTH= ALIGN= NOSHADE>).
- Supports extended list tags (continuations, bullet types, etc.).
- W3 Icon entities (tags like & diskette will display a picture of a floppy disk).
- Limited Frame support – AWeb still shows "Your browser does not support frames", but links to the pages are shown.

DISTRIBUTOR: Epic Marketing
PRICE: £29.95
REQUIREMENTS: 2Mb RAM, hard disk and CD-ROM drive.

SPEED: ●●●●○
Slightly faster than IBrowse but still limited by AGA and datatypes.

MANUAL: ●●○○○
15 pages plus lots of "online" documentation in HTML.

ACCESSIBILITY: ●●●○○
If you're used to other browsers, AWeb-II will seem a little sideways.

FEATURES: ●●●○○
Some good ideas, but needs to understand more formatting tricks.

VALUE: ●●○○○
If Netscape costs $45, what will AWeb-II cost?

OVERALL VERDICT:
AWeb-II's most important feature is that it doesn't use MUI.

70%

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Gasteiner 8-speed



CD-ROM drives were once the hardware you bought when you had everything else. Now, their low price makes them essential.

Not so long ago a SCSI double speed drive was the pinnacle of CD-ROM performance. Nowadays, even quad speed drives are looked down upon. In the changing world of the computer, nothing is ever good enough, fast enough or has enough capacity and CD-ROM has proven no exception to the rule.

Gasteiner has brought out two new drives, one for A1200s and one for the big box Amigas, both are 8-speed units. Both use the same mechanism and if you wanted an external drive for your A4000, then both would also come in the same external SCSI case. The case itself is very standard with two SCSI ports on the back, together with a SCSI ID selector – both of which are totally useless. The SCSI ports are covered over with a label saying you shouldn't use them. Instead there's an internal 40-way ribbon cable that snakes out of the back of the case, designed to go into the side of your A1200 much the same way.

NICE FIT

Fitting the drive is easy. Just open up your A1200, remove your hard drive from its cradle, replace the existing IDE cable with the one provided and then hook the CD-ROM drive to the little circuit board attached to the new IDE cable. Close up your machine, making sure you don't trap the cable in any sharp bits, install the software and away you go. I know it sounds a bit scary, a bit of an effort, but don't worry, nothing could be simpler.

AND FAST TOO

In performance these new 8-speed drives work a treat. With an average transfer rate of over 1Mb a second, your CD-ROMs might well actually be read faster than your internal hard drive. The *IDEFix* software that comes with the drive is easy to install and there's even a simple CD audio player included. You can boot from CDs using *IDEFix*'s CD^{32} emulation.

So, any caveats? I don't think so, other than the usual fear that your drive will be superseded by a 10- or even 12-speed unit. There is some question of the long-term viability of these units since they don't buffer the signals between the IDE controller and the A1200's processor the way that some of the competitors do. But if you're careful putting it together, there shouldn't be a problem. Overall, I'm very pleased with the quality of the drive mechanism, the speed of operation and the simplicity of installation. Do yourself a favour. If you haven't yet joined the CD-owning brigade, fork out your dosh for one of these drives. You won't regret it. AF

Bumper Christmas Giveaway

The senders of the first three postcards drawn out the bag will each receive a copy of DOpus 5.5 and a three button mouse. Send a card with your name, address and phone number to:

Wizard • AF Wizard Draw
PO Box 490 • Dartford
Kent • DA1 2UH

4000 REASONS TO BUY A CD-ROM DRIVE

If you own an A4000, or any big box Amiga with an IDE controller, then fitting the new drive from Gasteiner will be very simple. With the kit for the A4000, you even get an adaptor to allow you to fit up to four devices, getting around the complaint that IDE restricts you to only two. The adaptor plugs into your existing internal IDE cable and you can then plug in two new IDE cables going to your devices.

Fitting the drive itself is always a bit of a chore, but that isn't Gasteiner's fault, it's merely that Commodore, in their infinite wisdom, chose to make removing the front panel of the A4000 very difficult. Still, once it's done, it's done and it'll be well worth it.

Distributor: Gasteiner
PRICE: £189 – A1200 £149 – A4000
REQUIREMENTS: A1200 or A4000 Hard drive recommended

SPEED: ●●●●●
There aren't many faster drives.
MANUAL: ●●●○○
The A1200 instructions are confusing to start with and the *IDEFix* docs aren't exactly comprehensive.
ACCESSIBILITY: ●●●●○
Setting this up is as easy as fitting a new accelerator to your machine.
FEATURES: ●●●●○
It's a CD drive – what do you expect?
VALUE: ●●●●●
Extremely good value for money.
OVERALL VERDICT:
Easy to fit and fast as you like.

84%

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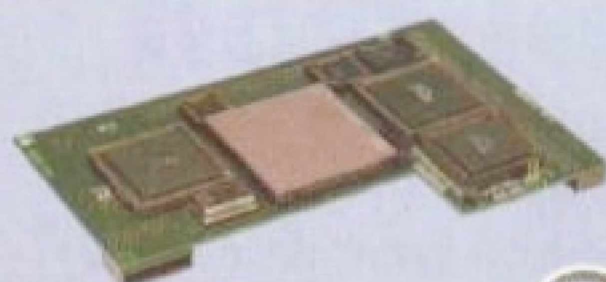
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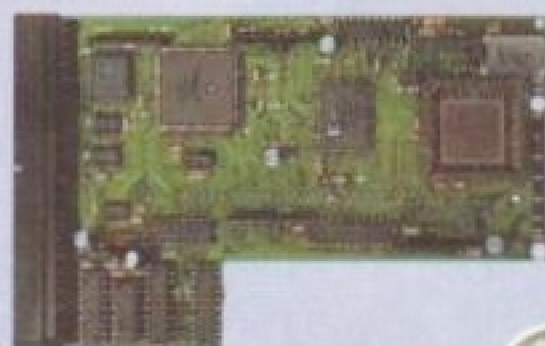
68030 25MHZ INCLUDING 25MHZ FPU	£99.95
68030 33MHZ INCLUDING 33MHZ FPU	£139.95
68030 50MHZ INCLUDING 33MHZ FPU CLOCKED UP TO 50MHZ	£189.95



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16MB SIMM 72-PIN	£189.95
SCSI ADAPTOR	£29.95

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VIPER BOARDS

The Viper 33 can have up to 128MB RAM installed, full Kickstart remapping, optional SCSI-II adaptor, on-board battery backed clock, 68882 co-processor option, instruction and data burst modes.

VIPER 33 MKII BARE	£129.95
VIPER 33 MKII 2MB	£149.95
VIPER 33 MKII 4MB	£159.95
VIPER 33 MKII 8MB	£189.95
VIPER 33 MKII 16MB	£239.95
VIPER 33 MKII SCSI ADAP.	£69.95

BLIZZARD BOARDS

The Blizzard 50 can have up to 128MB of RAM installed

BLIZZARD 50 BARE	£159.95
BLIZZARD 50 2MB	£189.95
BLIZZARD 50 4MB	£209.95
BLIZZARD 50 8MB	£239.95
BLIZZARD 50 16MB	£289.95

CO-PROCESSORS

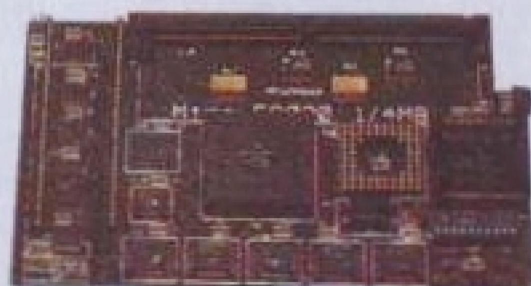
FPU's complete with crystal. State for Blizzard compatibility.

20MHZ FPU PLCC	£20.95
33MHZ FPU PLCC	£39.95
40MHZ FPU PLCC	£60.95
50MHZ FPU PLCC	£79.95
VIPER MKI SCSI-ADAPTOR	£79.95

GVP 68060/68040

A 68060 accelerator board for the A2000/4000 running at 50MHZ and allowing up to 128mb of use installable memory and a SCSI-2 hard disk controller.

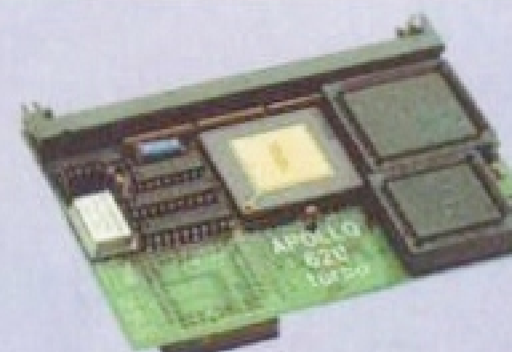
A2000 68040 25MHZ	£489.95
A2000 68040 40MHZ	£589.95
A2000 68060 0MB RAM	£699.95
A4000 68060 0MB RAM	£799.95
4MB STANDARD ADD	£99.95
4MB GVP RAM ADD	£159.95



A500 68020EC

A 68020EC processor accelerator card for the A500 and A500+, with an option to fit a 68881 or 68882 co-processor (PLCC OR PGA). This card can fit up to 4MB FastRAM and is fully auto-config. Not compatible with GVP Hard Drive.

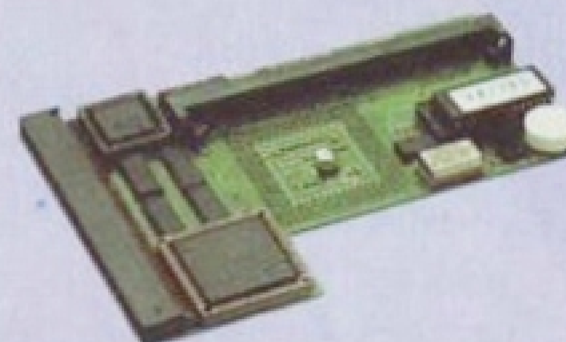
68020EC 0MB RAM	£99.95
68020EC 4MB RAM	£189.95



TURBO BOARDS

Performance 10 times of a standard A600 68020 CPU clocked at 28MHZ, 68882 FPU clocked at 28MHZ, up to 8MB FastRAM, autoconfigurating. Socket for 72-pin SIMM.

TURBO 620	£119.95



Performance 25 times of a standard A1200. 68040 CPU with 25MHZ. Up to 32MB FastRAM, autoconfigurating, socket for 72-pin SIMM.

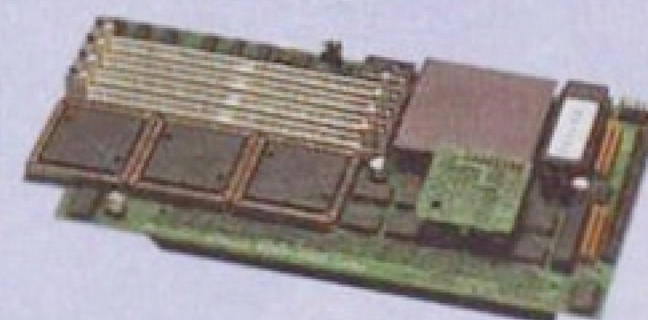
TURBO 1240 25MHZ +8MB	£299.95

Performance 40 times of a standard A1200. 68060 CPU with 50MHZ. Up to 32MB FastRAM, autoconfigurating, socket for 72-pin SIMM.

TURBO 1260 50MHZ +8MB	£549.95

Performance 3 times of a standard A4000/040. 68040 CPU with 40MHZ. Up to 128MB FastRAM, autoconfigurating, 4 sockets for 72-pin SIMM. Specify desktop or tower version.

TURBO 4040 40MHZ	£469.95

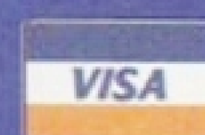


Performance 4-5 times of a standard A4000/040, suitable for the A3000 and A4000. 68060 CPU with 50MHZ, up to 128Mb FastRAM, autoconfigurating, 4 sockets for 72-pin SIMM. Specify desktop or tower version.

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Stocking Fillers!



Yes, it the time of the year once more when we round up little gift ideas for the Amiga owner in your life.

Three button salute

This is the mouse we use in the office on our Amigas. It has a nice long lead, three buttons (handy for MultiCX) and an ultra-high resolution of 560dpi, suitable for even the highest resolution screens. You can only get this mouse from:

Black three button mouse £14.99, beige mouse £12.99. From Wizard Developments on 01322 527800.

Paint & more



This CD-ROM got a whopping 90% and an *Amiga Format* Gold award when it was first reviewed in March of this year. Now it's available for only £19.99, it's even better value for money. The CD contains full versions of *Personal Paint 6.4*, the Amiga's best selling paint package, *Superbase Personal 4, Personal Write,* the mono and colour versions of *Personal Fonts Maker* and a whole host of clipart and fonts for you to use, not to mention the complete Eric Schwartz animation archive.

You can get it from:

Personal Suite £19.99 from Digita 01395 270273



Legal Alien



One of the Amiga's best-selling games this year has been Team 17's *Alien Breed 3D II – The Killing Grounds.* If your loved one likes blowing things up, what could be a better present? There are versions for 2Mb and 4Mb Amigas but be warned – to get the best from it, you'll need a fast machine.

Alien Breed 3D II - The Killing Grounds £24.99 from most good suppliers

Plug in and Type

If you c n't type v rything you w nt to on your k ybo rd b c use som l tt rs r brok n, then why not try this new keyboard from Dart Computer Services. OK, yes, it is a PC keyboard, but it will plug into your Amiga just the same. All the standard Amiga keys are mapped to the PC keyboard so you don't have to worry about never being able to use right Amiga q ever again.

Keyboard adaptor Price depends on your model of Amiga from **Dart Computer Services 0116 247 0059**

Speeeed up



If you are considering buying the *Killing Grounds* as a Christmas present, and you're feeling a bit flush you might consider getting this accelerator card to go with it. I know it's quite a bit outside the price range of these other pressies, but it's such outstanding value we thought we would include it anyway!

This accelerator is suitable for any A1200 and consists of a 68030 running at 25MHz, together with a 68882 running at 25MHz. There's a battery-backed clock and a 4Mb SIMM included for free for just £99.95. Power Computing also have faster boards, so if you are a real speed demon, give them a call and ask about the 50MHz version!

Power 030 £99.95 from Power Computing on 01234 273000

Put it in and take it out

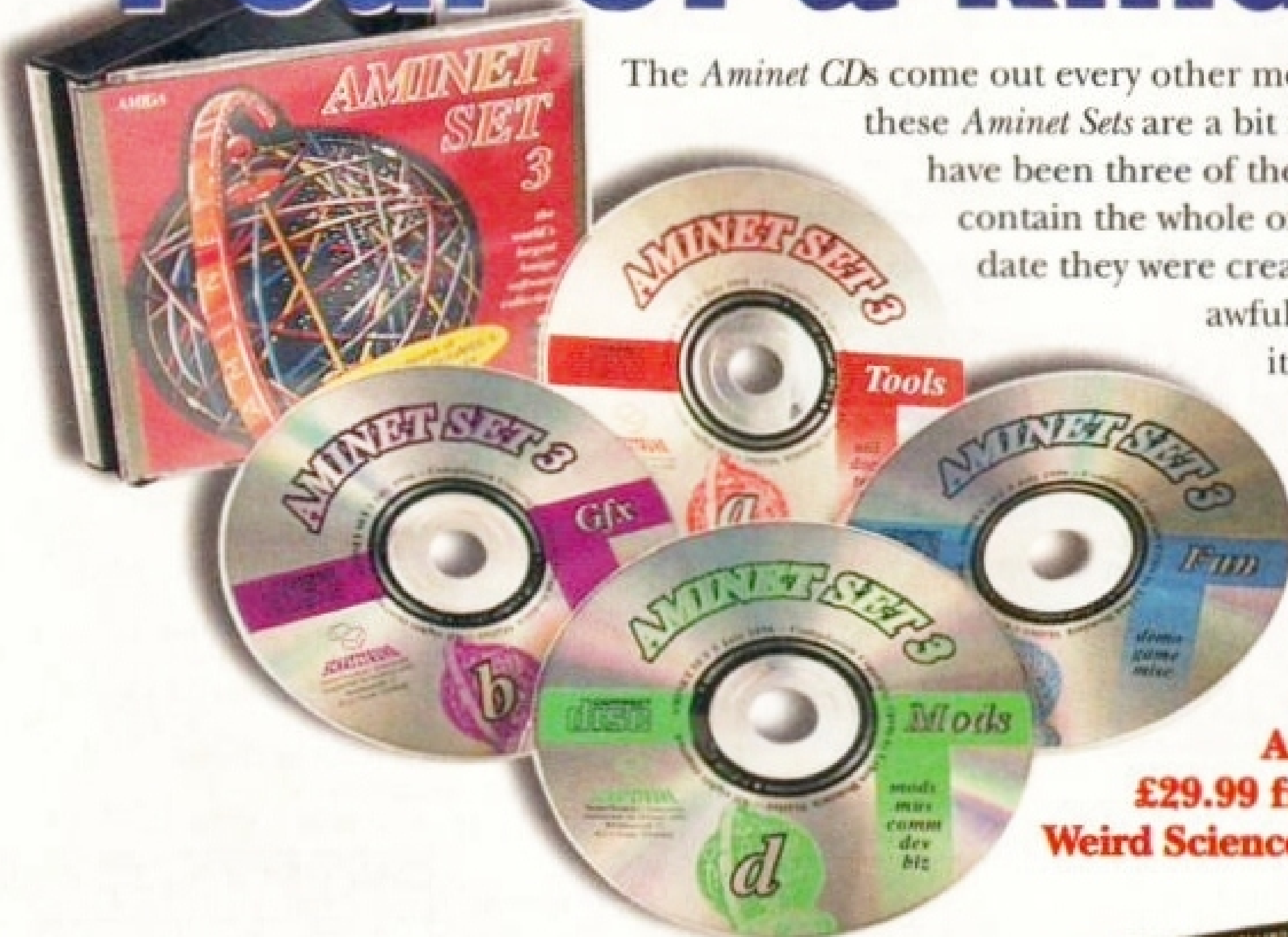




OK, so it's not a very exciting present, but you can never have enough blank spaces on which to write your inspiration. Removable media costs vary, from £5 for a blank CD-ROM disc all the way to about £70 for a Jaz cartridge, with plenty of choice in-between.

CD-ROM £8.95/10 pack £74.40 from First Computer Centre 0113 231 9444
Zip Cartridge £15.95 each/£69 per five pack/£129 per ten pack from HiSoft 01525 718181
EZ-Drive Cartridge £17.99 each from First Computer Centre 0113 231 9444
Jaz Cartridge £99.95 each from HiSoft 01525 718181

Four of a kind



The *Aminet CDs* come out every other month or so, but these *Aminet Sets* are a bit rarer. So far there have been three of them and they each contain the whole of Aminet to the date they were created. Now that's an awful lot of software, so it's no wonder that *Aminet Set* comes on four jam-packed CDs. The latest version of *Aminet Set* is Set 3 and it is worth every penny.

Aminet Set 3 £29.99 from Weird Science 0116 234 0682

Personal Development



If the person you're buying presents for is into Blitz or ACE Basic or even the Amiga E compiler we have on this month's CD, you can't go wrong with buying them the *Amiga Developer's CD*. It contains information heretofore unavailable to your average Joe or Josephine detailing the arcane secrets behind AmigaDOS, Intuition and Workbench and is crammed with handy examples.

Amiga Developer CD £14.99 from Weird Science 0116 234 0682

Creature comfort



If your loved one does a lot of typing, he or she may be complaining that their hands, wrists and/or arms are hurting. These symptoms can be signs of carpal tunnel syndrome or repetitive strain injury (not the kind our editor suffers lifting a glass to his lips we might add) and a good posture for typing is one thing that can relieve it. The TendaGuard wrist rest is designed specifically to put your arms into the correct position for trouble free typing and although it's a bit difficult to get used to at first, you'll soon feel the benefit.

TendaGuard Wrist Rest £23.95 from Dr. Paul Manley 0171 486 3581

Postal pages



Yes, we know you already buy the magazine, but wouldn't it be nice if someone was to get you a subscription? Once every four weeks or so, you would traipse down to your front door, yawning away, and find the garden of heavenly delights that is Amiga Format, just waiting there to brighten your day. No visits to the newsagents in the rain, just to find out that they've sold out, just pure Amiga bliss... **Check out page 79 for details**

Bumper Christmas Giveaway

Graeme awarded HiQ's Siamese system 88% in AF86. If you want to win one then Send a postcard with your name, address and telephone number to: HiQ Systems • AF Christmas Compo • Gable End • 2 The Square Watling Street • Hockliffe • Bedfordshire • LU7 9NB

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The new Gif Sensation double CD contains around 10,000 full colour images, Viewer and converters are included on the CD. Subjects include: Vehicles, Space, Science fiction, Textures, Landscapes, Sunsets, Money, Cartoons, Fantasy, Sports, Raytraced, Classic art. and loads more.

Suitable for adults only.

CD123 £19.99

ANIME BABES (18)

Contains around 5000 erotic hand drawn Images in the Japanese anime tradition.
This CD is of an Adult nature and should not be purchased by anyone likely to be offended by drawings depicting nudity and / or sex acts.

Includes images only suitable for persons over the age of 18.

CD191 £19.99

MICK DAVIS' CARTOON CLIPART

Mick Davis's Cartoon Clipart Volume One is a new Amiga CD-ROM containing 500 commissioned cartoon images, all of which can be used "royalty-free". Each image is stored as IFF, and all have been scanned at the highest possible resolution to ensure the best quality when printed.
Supplied with a 30+ page printed index of each image. Every image on this CD is 100% original and does not/will not appear on any other CD-ROM.

CD235 £24.99

MAGIC WORKBENCH ENHANCER V2

The new Magic Workbench CD contains the largest collection of Magic Workbench Icons, Backdrops and tools ever compiled. Includes well over 5,000 Magic WB Icons, Over 600 specially selected Magic Workbench backdrops in 8, 16 and 256 colours, over 30megabytes of Workbench tools, gadgets, patches and desktop enhancer tools/utilities. The CD also includes Magic Workbench aswell as many other items never before released on any Amiga CD ROM. If you want to update/enhance you existing Workbench 2 or 3 then this is the perfect Workbench add on CD ROM. This CD is only suitable for any Kickstart2/3 based Amiga's such as the A500+, A600, A1200, and A4000.

NEW!

CD187 £17.99

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Adult Sensation is possibly the Amiga's largest selling adult title. It features over **4,000** high quality 256 colour images of the "adult" nature. Image viewers and converters are included for any Amiga. (OVER 18 ONLY) (CD01) £19.99

Adult Sensation 2 not only contains **4,000** new colour images but also includes tons of adult related samples, adult music modules, tonnes of adult stories, adult animations, black&white 70's photos, adult games and more. (OVER 18) (CD115) £19.99

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Adult Animations contains hundreds of naughty? animations/film clips for Adults only. Viewing software included for the Amiga. Limited first stocks so order now. HURRY!!!! (STRICTLY OVER 18's ONLY) (CD146x) £29.99

Adult MENsation is a collection of unique images of the male body. This CD-ROM has been compiled to forfill the hundreds of requests for a CD dedicated to the ladies. Very easy to use. Okay on any Amiga. (CD164) £19.99

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*Many features are not present in the 1mb and 2mb versions.
*The free updater disk is only compatible with the 4mb version.

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Aminet 15(December'96) contains over 600mb of the very latest Amiga software, including games, demos, animations, music, tools, comms, patches, etc. Available for £12.99 or £10.99 when you take out a subscription.

(CD238) £12.99

DEVELOPERS CD v1.1

This CD was rated 95% in AF, it features all the tools and information, specifications etc, needed to produce and develop Amiga software. Includes the latest versions of the installer, CD pressing software, CDXL toolkit, etc.

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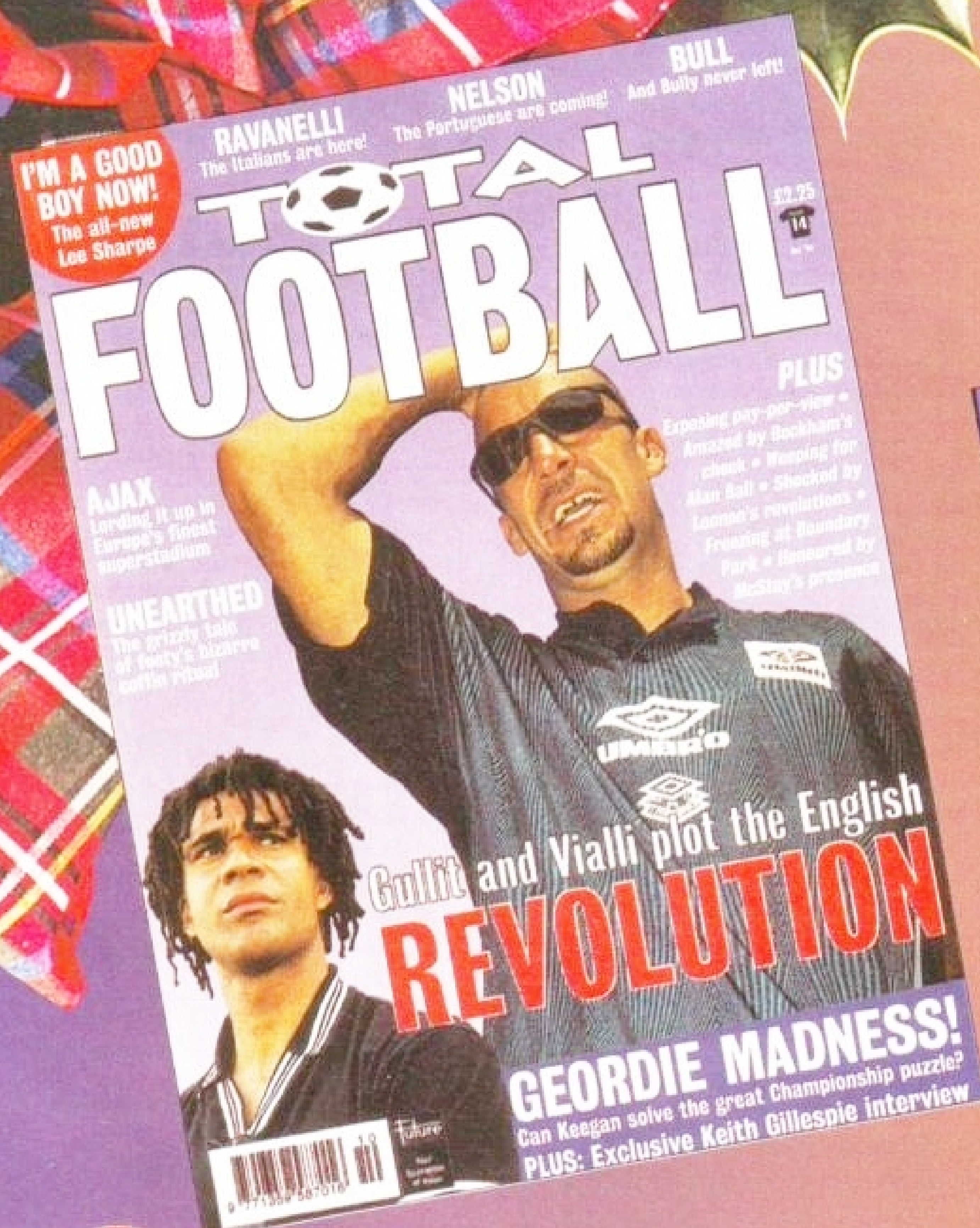
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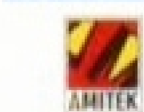
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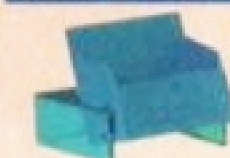
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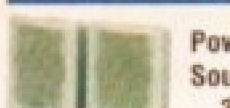
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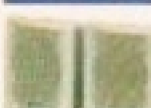


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Which computer(s), if any, do you own?

.... 502

Workbench

Life is full of mysteries and the Amiga is certainly no exception. Graeme Sandiford knows all about the quiet strength and willfulness of his favourite machine. So, send your queries to Workbench, *Amiga Format*, 30 Monmouth Street, Bath, Avon BA1 2BW.

AIR CRASH

This is my first letter to *Amiga Format* and it's a plea for help. I own an A1200 with a Blizzard 1230 – IV 50MHz accelerator board with 10Mb RAM and to my horror *B17 Flying Fortress* doesn't like the accelerator board. It keeps crashing at the same point every time with the same error (8000003). I used to have a Viper MK1 030 28MHz and it worked on that.

Do you know of any patch or fix that will get *B17* working with the Blizzard board. I know I can switch the board off to play it but it's slow and jerky. Please help.

Paul Nines
Weston-Super-Mare

The error 8000003 is associated with illegal memory addressing: it's usually seen when code written for a 68020 or better processor is used on a 68000. There is therefore no obvious reason why it should occur on a 68030 system. However, the fact that you have moved from a 28MHz to a 50MHz system may provide a clue: I'd guess that you are using the same SIMM, and it's possible that the SIMM isn't fast enough for the 50MHz board.

For a 50MHz processor, you really should use memory rated at 60ns, not 70ns or 80ns. I'd therefore recommend you update your SIMM.

CD^{32} FOR SALE (BROKEN)

I own an Amiga CD^{32} with the SX-1. Inside I have an 8Mb SIMM and a 60Mb "Areal" hard drive. I am still using the original PSU. When I try to partition it using "BDprep" and reset, I can no longer get the drive to boot up from cold or warm. Is it something to do with the boot priority?

Also, before I tried to partition, whenever I tried to copy files to the HD the whole system would freeze. This also happened when I tried to load programs from hard disk. What is happening? Can you please offer a simple solution to the above problems? My boot priority for my hard disk is 5.

P.S. I am trying to sell my whole system (SX-1, 8Mb CD^{32}, sampler, monitor) How much do you think I should sell it for? I haven't a clue and I want to upgrade to an A1200.

Martin Day
East Sussex

It's nothing to do with the boot priority. It sounds as though the hard disk or the interface is broken. From what you say, you cannot read to the drive, write to the drive or boot from it. That's pretty broken. How much you would get for it depends on how much in common you have with a second-hand car dealer.



If your CD^{32} is completely broken then the whole system is of little use to anyone.

KEEP CALM

Please help me before I do something rash – like throw my Amiga under a bus and go out and buy a PC. I have had an Amiga for three years and this year I decided to upgrade it.

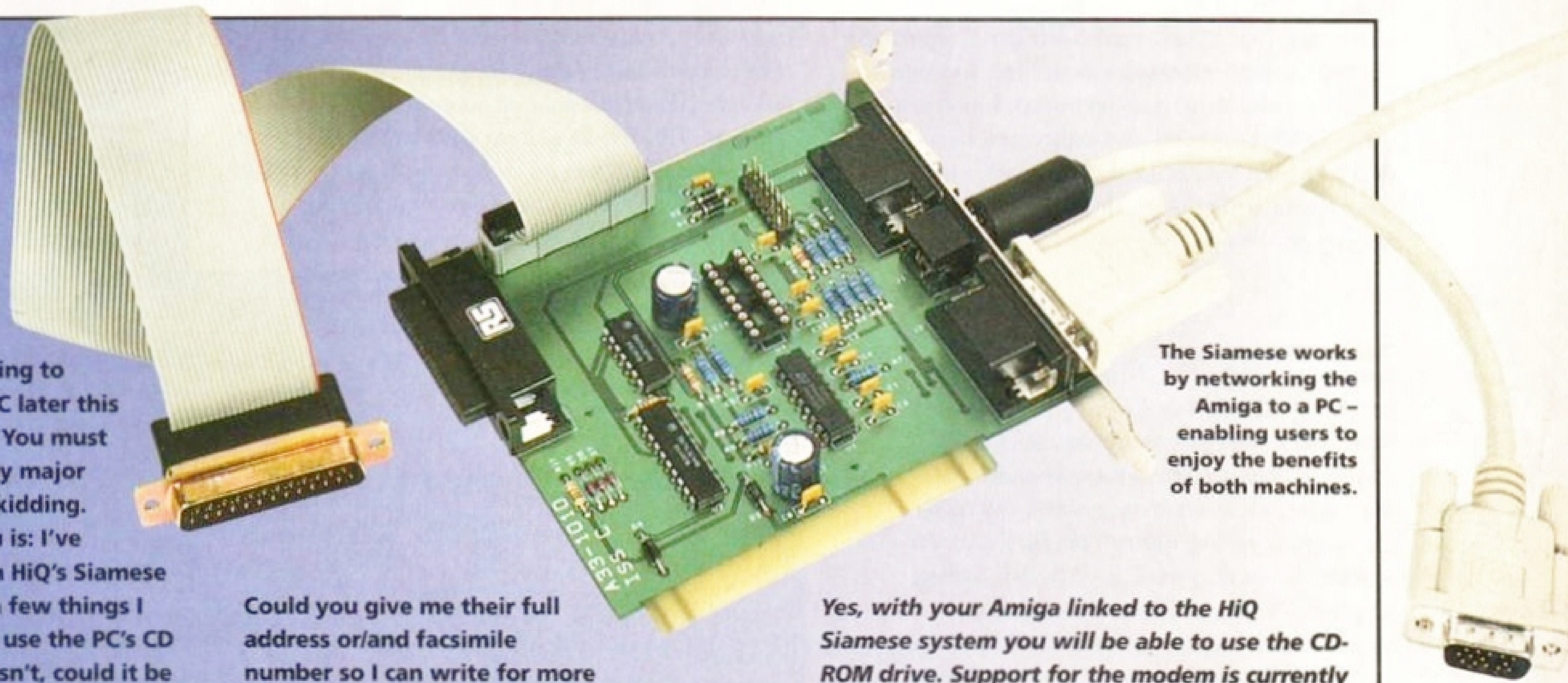
Continued overleaf ➡

HIQUESTION

It's a sad thing to say, but I believe the Amiga is slowly dying. I've been an Amiga owner for almost 10 years now and in my humble opinion, unless some miracle happens, the future looks quite dark. Well, what I'm trying to tell you is, I intend to buy a PC later this year. (Please don't shoot me! You must understand, computers are my major hobby, and... and...). Enough kidding.

What I wanted to ask you is: I've read the interesting article on HiQ's Siamese System (*AF86*) but there are a few things I couldn't find. Is it possible to use the PC's CD drive and modem? And, if it isn't, could it be possible in future versions, or is there another way to do this? (Don't say Ethernet, because I'll never find an Ethernet card over here). Only HiQ's phone number was printed. Could you give me their full address or/and facsimile number so I can write for more information and a dealer list. I own an A1200 with a Blizzard 1230/8Mb accelerator board.

Luc Stynen
Mortsel, Belgium



The Siamese works by networking the Amiga to a PC – enabling users to enjoy the benefits of both machines.

Yes, with your Amiga linked to the HiQ Siamese system you will be able to use the CD-ROM drive. Support for the modem is currently being worked upon. Contact HiQ at HiQ Ltd, Gable End, 2 The Square, Watling Street, Hockliffe, Beds LU7 9NB Tel: 01525 211327 or email steve@hiqltd.demon.co.uk



It's unlikely that *Final Writer* has caused a machine to crash – it's more likely to be a hardware problem.

I bought a 630Mb hard drive which a local dealer fitted and then I got a Blizzard 1230 accelerator card with 4Mb RAM and a Goliath power supply. All this worked well for about a week and then the computer started to take a couple of attempts to boot up from the hard drive, then it began to crash intermittently, sometimes right after power up or anything up to three hours later.

When it crashes, either the keyboard and mouse are locked out and the machine refuses to soft re-boot or the power light flickers and the screen flashes red, green or blue. Usually the crashes occur whilst using *Final Writer 4* or when trying to load a program from the hard drive. This problem has become more and more frequent and has caused several errors on the hard drive which I had to get re-formatted.

I was unable to pinpoint the source of the trouble so I asked my local dealer who said it was a software problem. Then I contacted the dealer where I bought the Blizzard board who suggested that I power my hard drive separately because the accelerator was pulling too much power through the motherboard. I am now thoroughly confused and frustrated because I don't know a lot about the intricacies of computers and what to do when things go wrong (as they so frequently do for me).

A Kean
Glasgow

Now, now – keep calm. There is no need to do something silly like buy a PC, especially as you have such a powerful Amiga system. My first thought is that it could be a problem with the hard drive: not a hardware problem, but rather the Amiga is pulling data off the hard drive too quickly. To test this, you'll need the HDToolbox program. The dealer who sold you the drive should have made sure you have it. It should be on the Workbench partition in the Tools drawer.

You'll need to alter a setting called "MaxTransfer". You'll find this hidden away. First select your drive, then click on the "Partition Drive" option. Now select "Advanced Options" and click on the "File system Change" button which appears. You'll see a box containing lots of "f's" marked "MaxTransfer". Delete two or three "f's", and save the settings. Repeat this process for any other partitions. Now reboot and see if that makes any difference.

If not, there might be a hardware problem. To find out what's at fault, use the process of elimination. There are four things which could be wrong:

1. *Faulty accelerator card,*
2. *Faulty hard drive,*
3. *Faulty Amiga motherboard,*
4. *Power supply problem.*

First of all, open the trapdoor and remove the accelerator card. There's no need to get a dealer to do this. Take it step-by-step and the card will pop out. Now use the computer for a bit and see if it still crashes.

Next remove the A1200's lid and disconnect the cables to the hard drive. This isn't difficult (some find it easier than removing trapdoor cards). Take out only the screws which are holding the lid on: there are two at the back holding the floppy in place, and another few holding the motherboard in place – leave these alone. If memory serves you'll only need to take out five screws: three at the front, and two at the edges.

Now hinge the lid off, starting with the side away from the floppy disk drive. The back of the lid is only clipped into place.

Remove the data and power cables to the hard drive, start the computer and use it with floppies. If that works, the Amiga itself is fine. Try it without the hard drive but with the accelerator installed (fitting the accelerator with the lid off is very easy indeed).

By now you should have narrowed down the problem to either a power supply problem or a faulty Amiga. Repeat the process with the original power supply in place of the Goliath, on the off chance that that it is to blame. If this is too much, any good dealer claiming to deal with Amigas will be able to perform these tests.

When you say you had to get the drive re-formatted, I hear alarm bells. I've heard of several cases when Amiga users have felt the need to bring their Amiga's back to dealers to get the hard disk re-formatted, and have paid up to twenty quid for the privilege. This is a bit of a rip off to be honest. It's extremely unlikely that an Amiga would get so screwed up that the hard drive would need re-formatting. Sometimes a program can crash, and leave the hard drive in an "invalid" state. It won't be possible to write or delete anything, and the drive will seem to be in constant use. If this happens: leave it alone! The operating system will fix it itself. There is no need to bring it to a dealer. The drive is busy because the machine is repairing the disk drive. Just leave it in the corner for half an hour and it should repair itself.

If things get so screwed up that the hard drive needs to be formatted, here's how you do it.

1. *Boot from the standard Amiga Workbench floppy disk.*
2. *Open a Shell window.*
3. *Enter "Format drive dh0: name Workbench QUICK FFS"*
4. *Enter "Format drive dh1: name Work QUICK FFS"*
5. *That's it.*

This assumes two things: your hard drive has been set up with two partitions (nine times out of ten this is right) and that the partitions are called dh0: and dh1:. They might have different names, hd0: and hd1: for example. You can check from the "secret"

CD-ROM, PLAIN AND SIMPLE

I'm an A1200 owner and don't have any extra memory or accelerator boards. I was wondering if you could tell me whether a CD drive would run on a plain old A1200 and if so which drive is not extremely expensive (under £150) and will do a good job. Also where could I get a word processor, art and animation package, modern encyclopaedia and games.

John Griffin
East Sussex

If you check out the November issue of our of Amiga Format, you'll see a head to head review of two drives – one from Eyetech and the other from Siren. Both will work on an un-expanded A1200 and both cost between £150 and £170.

You might be able to make up your own system for less if you can source a second hand IDE/ATAPI dual speed CD-ROM, and Eyetech will sell you the parts you require separately.

There are quite a few CDs out now, check out any of the adverts in this magazine, including the Epic Interactive Encyclopedia. For the others, I'd recommend that you get an Aminet collection – there will be enough software on there to keep you happy for months.

The two new CD-ROM drives – both give you cheap expandability and speed.



menu which appears when you hold down both mouse buttons at boot time.

If the hard drive simply doesn't appear on the Workbench or in the menu, it will need to be partitioned. This should not happen. I can't think of a situation when a crash would cause this situation. It's more likely to be a hardware failure, and if this happens with a new hard drive I would take it back for a replacement.

PRINTER PROBLEMS

We are totally new to computers and in April purchased a second hand Amiga 1200 2Mb RAM with internal floppy drive. We have Workbench 3.0 and no hard drive. We then saw a reasonably priced printer. A Commodore IP3300 inkjet for sale at Escom in Wakefield. Having no knowledge before purchasing the printer we asked the question: "Will it work with the Amiga 1200?" The answer was yes it should do – there were no real doubts.

It was supplied with its own driver but appears to be only for a PC. I have sought advice from friends who think it is not compatible. I have also phoned an Amiga helpline who suggested I use the HPDeskjet driver (they say they'd never heard of this printer!) Unfortunately, the HPDeskjet driver didn't work and Escom had already closed down when I went back there for advice. Can you help?

W Banks
Pontefract

Any printer which works with a PC should work with an Amiga – with the exception of the cheaper Windows-specific laser printers which use the PC to do the work of the printer's firmware. Any printer can be used to print plain text: use a standard printer driver such as one for an Epson printer. However, it's the graphics printing which can cause problems, and this is why you need a dedicated driver. You might as well re-format the disk you got, because it's definitely a PC only driver.

It's very likely that the Escom/Commodore printer is a badged printer from some other manufacturer. Look through the manual for hints. There should hopefully be a list of printers with which yours is compatible.

You can then use one of these drivers (any by the way, it's worth trying as many drivers as you can – it's very unlikely you'll actually break anything).

K?YBOARD FA*LURE

I own an Amiga Technologies A1200 on which I spent my student loans upgrading into quite a beast, including an internal hard drive and a Blizzard accelerator, both for which I had to break the warranty seal (the metal shielding near the expansion port was too long and had to be bent back). In fact I can't remember if I sent off my warranty card as I knew I would be doing this. Months later I am now experiencing problems with the keyboard with the several of the keys not functioning; 'F8', '-', '[', '#', and '4' on the numeric keypad. They didn't stop working straight away but intermittently.

It's driving me crazy having spent all this money on it, especially when I and my friends use the Amiga for assignments.

Please advise – I am not scared of a screwdriver if you think it's safe for me to open the keyboard. If not can you recommend somewhere cheap (I've no money left) I can mail it to (I live near Grimsby).

Jonathan Day
Lincolnshire

I guess that the Amiga is so bulging with extras that the internal hard drive has actually pulled the A1200's keyboard cable out of the little connector it fits into. It's quite a common problem, and takes about five minutes to fix.

Take the lid off (see 'Keep Calm' letter on how to do this) and locate the green ribbon which connects the keyboard to the motherboard. The motherboard end of the cable is connected to a black connector. There is an outside clip which can be lifted up, and this lets the cable move in and out freely. Take the opportunity to clean the end of the keyboard cable with a lint-free cloth and some alcohol (being a student you shouldn't have any problems getting hold of some alcohol).

Make sure the cable is sitting right inside the connector and then push the outside clip back home. This should firmly grasp the cable and stop any loose connections. Put the Amiga back together again. If this doesn't fix the problem you'll need to either buy a replacement keyboard or send the A1200 away to have it repaired. Try Dart on 0116 2470059.



If you're experiencing keyboard problems then don't despair – it may be something as simple as a loose cable.

INTERNET ON A CD32

I own a CD32 with a 2Mb RAM and SX-1 expansion unit with a 3.5 external floppy drive and keyboard. I am currently using Workbench 2.

1. What software, hardware and memory is required to access the Internet and World Wide Web on the Amiga?
2. A CD is available (Get on the Net from Epic Marketing) which claims to contain all the required software to get on the net. In what way could this affect the answer given to my first question?
3. With the modem I am going to purchase, software is supplied to access Compuserve. Is Internet access available through this service on the Amiga?
4. How much does the access and phone bills cost if I use the Internet?

Steven Hassell
Birmingham

1. To access the Internet you need the following software: A TCP/IP stack (such as Miami, Termite TCP or AmiTCP/IP). To use the World Wide Web you'll need a browser such as Aweb, Voyager or IBrowse. From a hardware point of view you'll need a modem, and an extra 4Mb memory is all but essential. I would recommend a hard drive too.
2. It doesn't change the answer, all it does is supply the software you need in a form you can use easily.
3. The software to access CompuServe will be PC and Mac only, and won't work with the Amiga. Due to the way CompuServe is updating its system it's no longer possible to use it with the Amiga.
4. Using the Internet requires a telephone call to your Internet Service Provider. In most cases, if you use the Internet for an hour, this call will cost exactly the same as if you had picked up the handset, dialled

Continued overleaf ➡

BIGGER DRIVE PLEASE

I have an A500 with 1Mb chip RAM and 4Mb fast RAM, Workbench 2.04 and an external 1.76Mb disk drive by Power Computing. I also have a RENO CD-ROM drive and a 40Mb GVP impact series II HD8+SCSI hard disk drive. Is it possible to upgrade the 40Mb hard drive to a bigger one – say 540Mb – without having to buy a new hard drive interface because my 4Mb RAM expansion and CD-ROM are connected to the present one. Also if it is possible could you tell me where I can get one and roughly how much it would cost.

Richard Hockey
Gosport

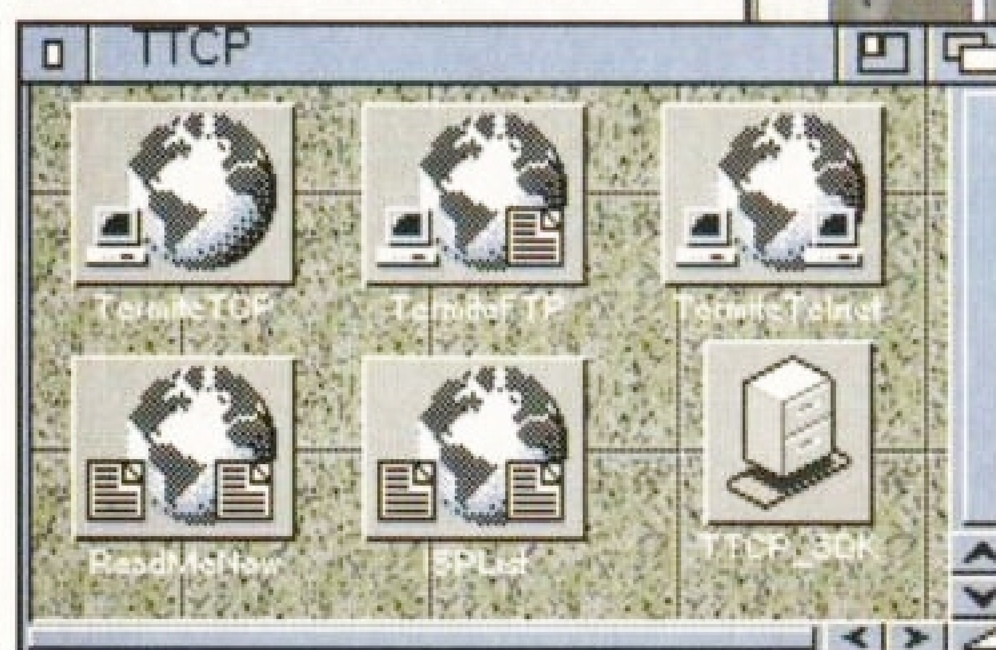
The GVP interface is standard SCSI, and the 40Mb drive is a standard SCSI drive. You can take it out and replace it with any other SCSI hard drive. The only problem is that trying to source a new SCSI hard drive smaller than 1Gb is very tricky. If you don't want to spend the £150 for 1Gb, look around for smaller second hand SCSI drives.

Remember also that you can keep the 40Mb drive and attach the new drive externally if you get a suitable power supply and box. Most importantly of all though is the fact that you can fit a Syquest, Zip or Jaz drive to the SCSI interface.



Underneath that shiny red helmet you should find our very own Mr Irvine – leaving Bath at speed after handing his copy in late, again!

You'll find a detailed review of Termite TCP, the latest TCP/IP stack, in the November issue of *Amiga Format*.



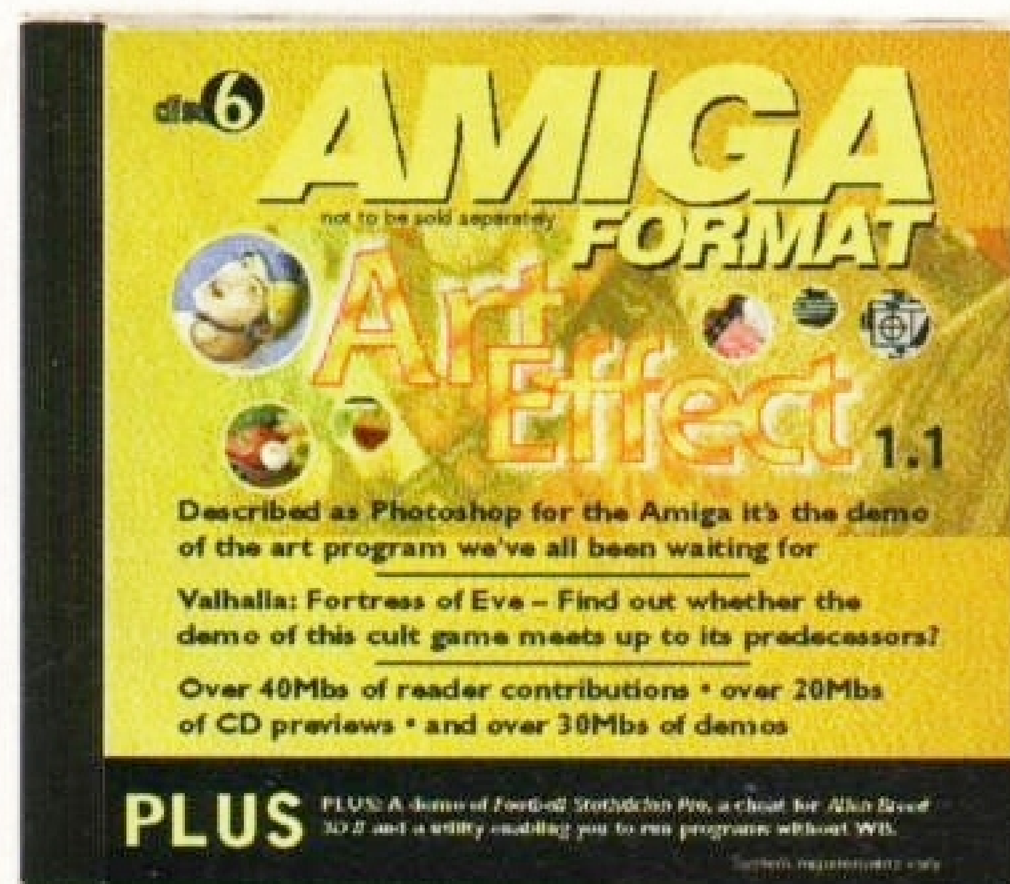
them up and spoken to them for 60 minutes. It therefore makes sense to pick an ISP with local access to keep the phone bill down. You will also need to pay your provider a fixed charge. A few providers work differently: some offer an 0800 number (but bill you per second for access). Others, such as CompuServe, charge online time as well as making you pay for your telephone bill.

QUESTIONS, QUESTIONS

1. I have a Star LC-20 printer attached to my computer. Whenever I boot from a Workbench 2.0+ disk I have to replace the printer device and parallel device files in the Devs drawer with the ones that came on Workbench 1.3. If I do not do this the computer says I have not put the printer on-line. I have contacted Star but they just sent some Amiga drivers which do not solve the problem. Is there any way around this because it's a pain when booting from CD's?
2. How do I make an assign from two sources to one destination? e.g. if I wanted to assign to libs: the libraries from my Workbench 3.0 disk and the libraries from my *AFCD6*.
3. Are there any good PC emulators that are hardware based which will work with my A1200?
4. Is there any way to stop Web browsers such as AWeb and Voyager 10 running out of memory by being able to prevent them copying files to RAM? I have tried assigning T: to a floppy disk instead of RAM:T but it soon runs out of space and as a result the computer crashes.
5. Is there any way to make my CD-ROM display animations smoothly? I've noticed that some programs play animations far more smoothly than others.
6. Where will the PowerPC upgrade fit into the A1200? I want to get some more RAM but I do not know if I buy a trapdoor expansion whether or not I will be able to use it with the PowerPC upgrade when it comes out.

James Griffin
Cornwall

1. Try updated drivers from a third party printing utility such as Turboprint.
2. Although you can create multiple paths (for example, when you type a command at the Shell the Amiga will look in c: and RAM: and a few other places – type path by itself for a list) multiple LIBS: paths are in general not a good idea. However, there is nothing to prevent you from trying. The key is to use the "ADD" option with the ASSIGN command Try including a line such as:
ASSIGN >NIL: LIBS: cd0:LIBS ADD
in your user startup sequence.
3. No. There are no hardware PC emulators, good or bad, for the A1200.
4. Sorry, there isn't really a lot you can do. Forcing your screen modes to use NTSC mode in as few colours as possible might help a little bit, but by far the best solution is to buy more memory or a hard drive.
5. How well an animation can be played back from CD or Hard drive depends on several things: the format of the animation (colours used, degree of movement), the playback program and the amount of free memory available to buffer the data. Experiment with utilities such as BigAnim, Viewtek *and* Rtap *and get more memory.*
6. No-one knows. Don't let that fact stop you from buying a memory expansion and enjoying it now, rather than holding off for hardware which might never appear.



The superb *AFCD6* complete with demos of *Art Effect* and the *Fortress of Eve*.

IF YOU HAVE A QUERY...

At *Amiga Format* we aim to answer as many questions as possible. Unlike some magazines, we don't just concentrate on our areas of expertise – we take on all your problems (as long as an Amiga is involved).
Here are a few tips on sending in questions:



Graeme Sandiford

- **Be concise.**
- **Detail the problem as best as you can.**
- **Describe the events that caused the problem.**
- **Give full details of your equipment.**
- **Make sure your question is relevant and wouldn't be more easily solved by contacting the dealer from whom you bought the goods.**

Bear these points in mind and fill in, photocopy, or copy the form below as best you can. Unfortunately we cannot reply personally.

Send your letters to Workbench, *Amiga Format*, 30 Monmouth Street, Bath, Avon BA1 2BW.

Your Amiga:

○ A500 ○ A500 Plus ○ A600
○ A1000 ○ A1200 ○ A1500
○ A2000 ○ A3000 ○ A4000

Kickstart version

○ 1.2 ○ 1.3 ○ 2.x ○ 3.x

Hard Disk: .... **Mb**

Manufacturer: ....

Extra RAM fitted – type, size, (Mb) and manufacturer:

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Details of other hardware:

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New 33MHz SX32Pro, 2.5GB InstantDrive, SX32 Combo, Internet Package, A1200's for £199.95!!!

The Top-Rated Eyetech *CDPlus* for the A600 & A1200 *4-speed* and *8-speed* CDROM drives



The CDPlus and SyQuest EZ135 drives

- ✓ 4- or 8- speed external CDROM unit in quality CE-approved case with heavy duty PSU.
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- ✓ Gold plated audio phono sockets at rear and front panel headphone socket and volume control
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What do the reviewers say?

Amiga User International - 97%
"...It all worked faultlessly..."

Amiga Format - 96%
"...An absolutely superb bit of kit..."

***Amiga Shopper* - 90%**
"...This is a quality product..."

Amazing value:
4-speed – *only £169.95*
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Also available without CD mechanism (so you can fit your own drive) for £129.95



The CDPlus MiniTower & Desktop cases

Considering a PowerStation?* The CDPlus is now available with an alternative, 230W, CE-approved, PC MiniTower or Desktop case (which can also power your A1200) - *for only £25 extra

SX32Mk2 & SX32Pro *Internal* Expansion for the CD32

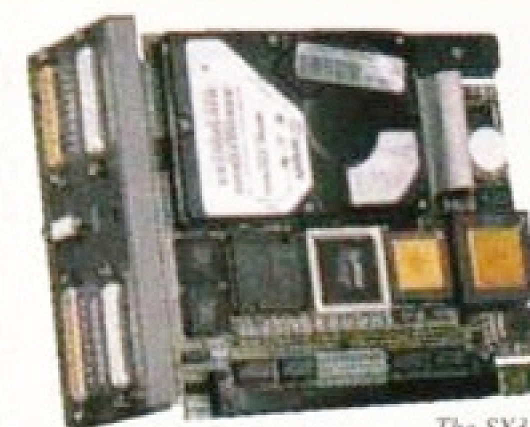
At last – the SX32 Pro is here!

- ✓ ***Twice the memory access speed of an A4000/40 (AIBB)***
- ✓ ***Runs Gloom at full speed - in full screen mode!***
- ✓ ***Make your CD32 into a high powered, portable Amiga!***

The SX32Pro and SX32Mk2 add...

- ✓ 33 or 50MHz '030 MMU CPU and FPU socket (33MHz FPU socket only on the SX32Mk2)
- ✓ Simm socket for up to 64MB of 32 bit fast (60ns) RAM (up to 8MB fast (70ns) RAM on the SX32Mk2)
- ✓ Buffered IDE interface for internal 2.5" hard drive ***and*** second hard drive, SyQuest, Jaz *or even 8 speed CDROM* (optional extra on the SX32 Mk2)
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...to the CD32's existing mouse, joystick, keyboard, audio, RF, composite video and SVHS ports.



The SX32Pro

What do the reviewers say?

Amiga User Int'l	*"95% - Definitely Recommended"*
Amiga Computing	*"90% - A Dream to Use" Blue Chip Award*
Amiga Format	*"93% - A Job Well Done" Gold Award*

SX32Mk2 - *until Xmas* -	***£189.95***
SX32Pro-33	***£299.95***
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Genuine Amiga 89-key compact keyboard	*£34.95*

SX32 floppy, hard drives 20MB-1.1GB, RAM – *Please ring*

All models include full pictorial fitting instructions, WB3.0 & utilities on CD and 'Click-and-Go' hard drive installation diskette

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(Specifications given for 17" model) **15" now only £399.95**

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- ✓ ***4MB*** memory expansion, V32 (14.4) modem, all cables and full installation instructions
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- ✓ ***Three months unlimited Internet***, Web and email access with 1MB of your own World Wide Web space
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Many other options are available – ring or send for further written details - eg:

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- ✓ No start-up fee
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- ✓ Fixed monthly charge

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AMIGA HEALTH WARNING – Please read this, it's in your own interest!

If you have recently fitted – or intend to fit – an IDE/ATAPI CDROM to your A1200 *(other than an Eyetech CDPlus unit)* **without** a buffered interface then your Amiga is in risk of serious damage arising in the future. The A1200 – unlike A4000's and PC's – has *NO* internal IDE buffering. On the A1200 the IDE interface connects *directly* to the A1200 processor chip which itself has insufficient output to drive more than one IDE/ATAPI device (and only then on a short data cable) for any sustained time period. To the best of our knowledge the ***Eyetech CDPlus*** is the only A1200 ATAPI CDROM supplied with a buffered interface as standard. We are now making this 4-device buffered interface available separately for use with other kits and DIY CDROM installations.

At only £39.95 inc VAT it is a small price to pay to preserve your Amiga's health.

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- ✓ Generate 25fps anims direct from video
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Special offer – Videomaster, cable, camera and psu	***– only***	***£229.95***

A1200 *InstantDrive* Hard Disk Kits



InstantDrives are only available from Eyetech

- ✓ Rated ***99%*** – AUI November 1996, ***95%*** - Amiga Format October 1996
- ✓ No hole drilling, case clipping, or shield removal required
- ✓ All drives are brand new with a 2 year warranty and come inclusive of full fitting kit and easy-to-follow pictorial instructions
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- ✓ AV drives come with a fully licensed version of Optonica's MMe multimedia authoring software ***OR*** internet access software (shareware) preinstalled

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1.08GB	This top-of-the-range superslim drive is perfect for the SX32Pro	**£249.95**

DIY and Bargain Corner
- for those hard-to-find parts for your Amiga expansion project

Hard drive cables and cases	
2.5"-2.5" hard drive cables for A600 & A1200	**£9.95**
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3.5" removable drive deluxe external HD case	**£29.95**
Double drive bay for Floppy/SyQuest/ext HD – fits under CD32	**£24.95**
4 HD adaptor cable for A4000	**£29.95**
CDROM cables, cases and interfaces	
4-device buffered EIDE interface for A1200	**£39.95**
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This Month's Specials	
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The Eyetech SX32 Combo Pack

This really is ***the*** Amiga bargain of a lifetime - but is only available whilst stocks last

Just look what you get!

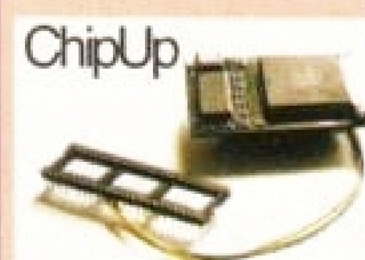
- ✓ Brand new CD32, games controller/joypad and power supply
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- ✓ Amiga 89 key compact keyboard
- ✓ 6MB of memory (2MB chip +4MB fast)
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- ✓ Hard drive cable and partitioning, formatting and Workbench installation diskette



CD32/SX32 Combo Pack £399.95
Also available with the SX32 Pro - ring for details

Why not enhance your Combo with the ComboPlus accessory package? Buy the ComboPlus with your SX32 Combo and get a mouse, mousemat, Amiga 'First Steps' book, audio leads and 2 extra Amiga CD's for only £24.95

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EYETECH

Amiga.net

The sites are out there...



Since Scully and Mulder became household names there's been a surge of interest in all things alien. Darren Irvine follows the trend and picks out some of his favourite sci-fi related web sites.

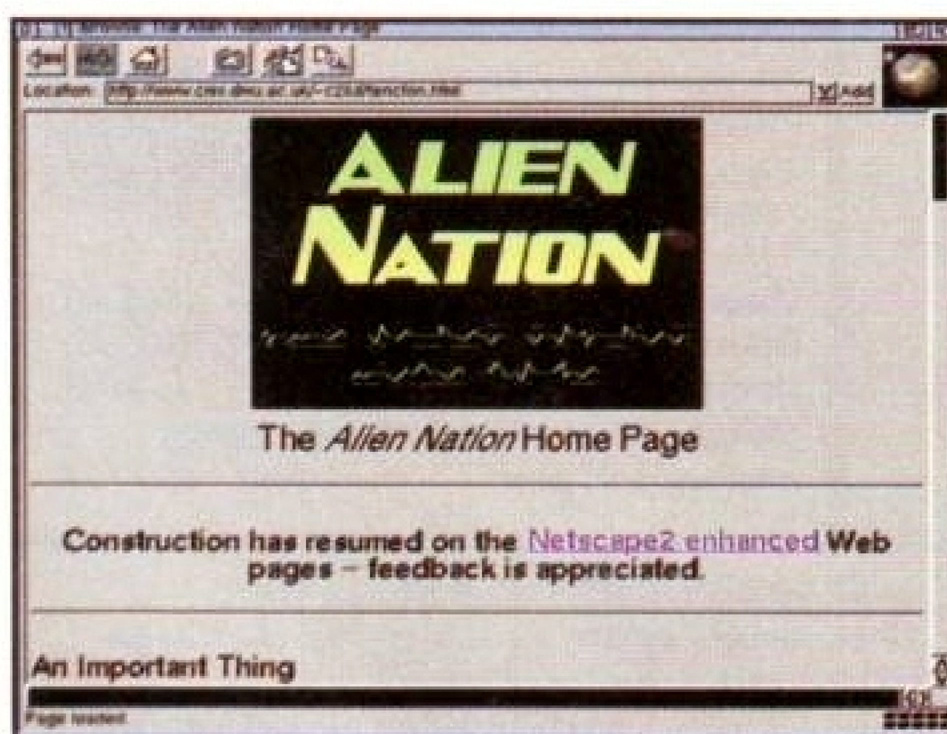


Science fiction, eh? It gets everywhere – in books, at the movies, on TV... It's like vermin that needs stamping out... action must be taken soon to prevent... aarggh! Sorry, I got a tad carried away there – too much exposure to old Blake's 7 episodes during the researching of this month's AmigaNet.

Actually, I like sci-fi, and judging from the amount of stuff that's out there, so do loads of other people who use the Internet. Many of the sites that deal with sci-fi have been set up by enthusiasts (often students) but some of them really are good enough to rival professional sites.

So what exactly is out there? Well, there are sites devoted to just about every major (and quite a few minor) science fiction film or TV show. Popular series such as the X Files have literally dozens of sites, and are easy to find doing a simple search through a search engine like Yahoo or AltaVista.

So as well as the favourites, I've decided to mention a few of the more obscure sites on the Web, which in turn have links to even more arcane pages.



The Alien Nation home page has more information than you could possibly ever want to know.

2001 – A SPACE ODYSSEY

The special effects in 2001 are pretty amazing when you consider that it was made 28 years ago – they are still impressive today. This site has a huge amount of data concerning the film, including details of how most of the major special effects were accomplished. There are some great pictures and additional material such as excerpts from the soundtrack are available to download. As with most of the sites here, this is fairly graphics intensive but well worth a visit at: **http://www.lehigh.edu/~pjl2/films/2001.html**

OUTER LIMITS

This is a nice official site, with well presented graphics in keeping with the general feel of the show itself. Although most of the information is about the new series of the Outer Limits, there are some links to pages that deal with the original 60s show. The URL that you need is: **http://www.mgmua.com/outerlimits**

BLAKE'S 7

Blake's 7 is often described as a "Classic" BBS sci-fi series, but in my opinion this word gives the wrong idea. When I was younger I watched the thing as avidly as the next sci-fi fan, and it still bears looking at now just to see how bad the acting and special effects were. But despite it's shortcomings, the series still has an odd appeal. Check out the unofficial homepage at: **http://www.ee.surrey.ac.uk/Contrib/Sci-fi/Blakes7**

FINDING MORE STUFF

If you are completely new to using the Net you might not yet be familiar with the concept of an Internet Search Engine. These are basically huge databases containing information about a staggering number of pages on the World Wide Web. You can enter a keyword or keywords and the Search Engine will return a list of pages that have matches for your search criteria. One of the longest running and more well known search engines is Yahoo, and it's extremely easy to operate. If, for example, you were interested in pages concerning Seaquest then you'd simply type the word "Seaquest" into Yahoo's keyword box, and click on "Search". The address you need to get started is: http://www.yahoo.com



2001 A Space Odyssey is arguably one of the all-time great science fiction films.

Bumper Christmas Giveaway

Win a 15" working model of the Star Trek USS Voyager

***SFX* – the science fiction mag – have kindly donated the spaceship. Simply send a postcard with your name address and telephone number to:**

SFX • AF Christmas compo
30 Monmouth Street • Bath
Somerset • BA1 2BW

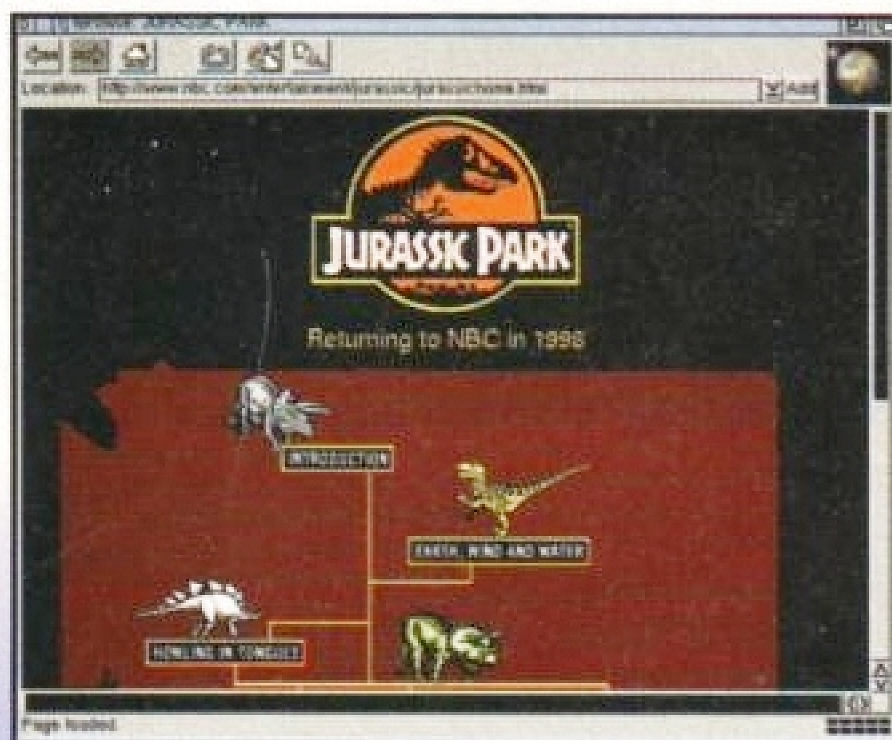
SFX

JURASSIC PARK

Nearly everyone must have seen this movie by now and we all should have a vague idea how some of the special effects were achieved. This site offers a wealth of information which should be of interest both to avid fans of the movie and to those who are generally interested in the technology of modern film making. As you'd expect from an official site run by NBC, the pages are very professional and, although graphics intensive, this site is great fun. Set your browser for:
http://www.nbc.com/entertainment/jurassic/jurassichome.html

SPACE PRECINCT

Space Precinct is a show you either love or hate. It's full of funny-looking aliens, stupid plot lines and terrible acting. Then again, that sounds like all of the sci-fi series that I like. If you're a fan of the show then you'll find some interesting and obscure facts about the stories and the making of the series at:
http://www.neosoft.com/sbanks/sp/SpcPnct.html



The official Jurassic Park site gives loads of background information about the film.

ALIEN NATION

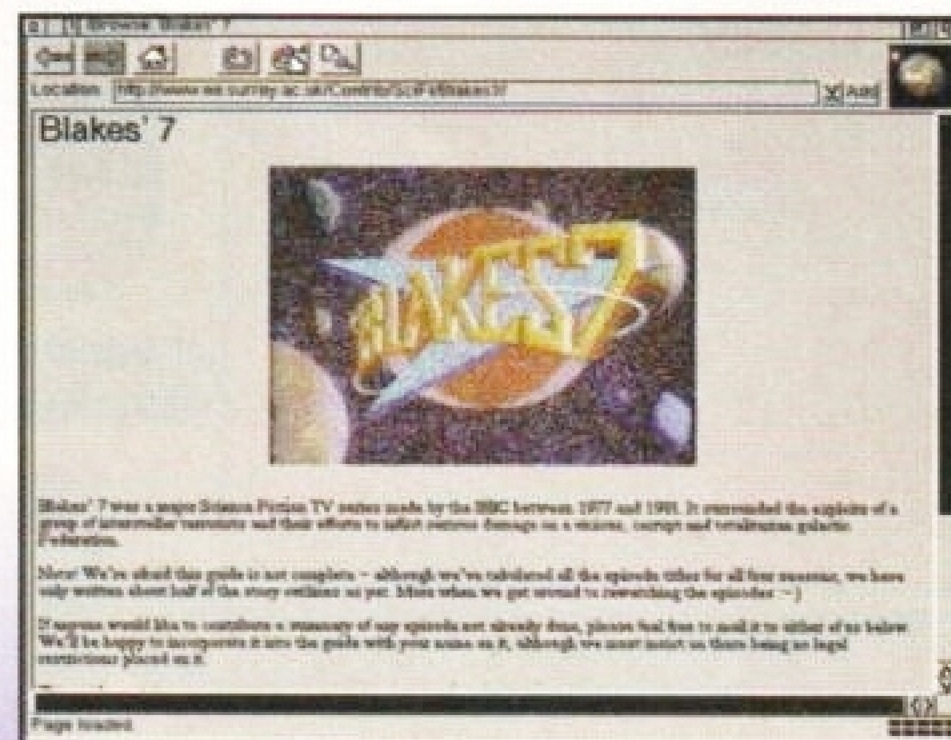
This is another programme with it's own dedicated band of followers. If you're an avid fan then you may well know some of the information contained on the Web Pages, but there should still be some stuff here that you haven't heard before. If you're just a casual viewer then you will definitely find something of interest at:
http://www.cms.dmu.ac.uk/~c2kd/tencton.html

BABYLON 5

This is a nicely produced site, which suffers from the usual drawbacks of such graphically oriented pages in that it incurs long download delays as you wait for your browser to retrieve and display the many graphic images. On the plus side, it's actually well worth the wait, as the site contains lots of information about the show. The URL that you need is:
http://www.bluemoon.net/~lev/home.html

STAR TREK VOYAGER

Whoever produced this site obviously loved the series because they've spent a huge amount of time setting up a professional-looking site. It's hugely graphics intensive and you'll need to have a lot of patience to get the most from it but if you're a fan of the show it will be worth the wait. The address is:
http://dspace.dial.pipex.com/town/square/el80



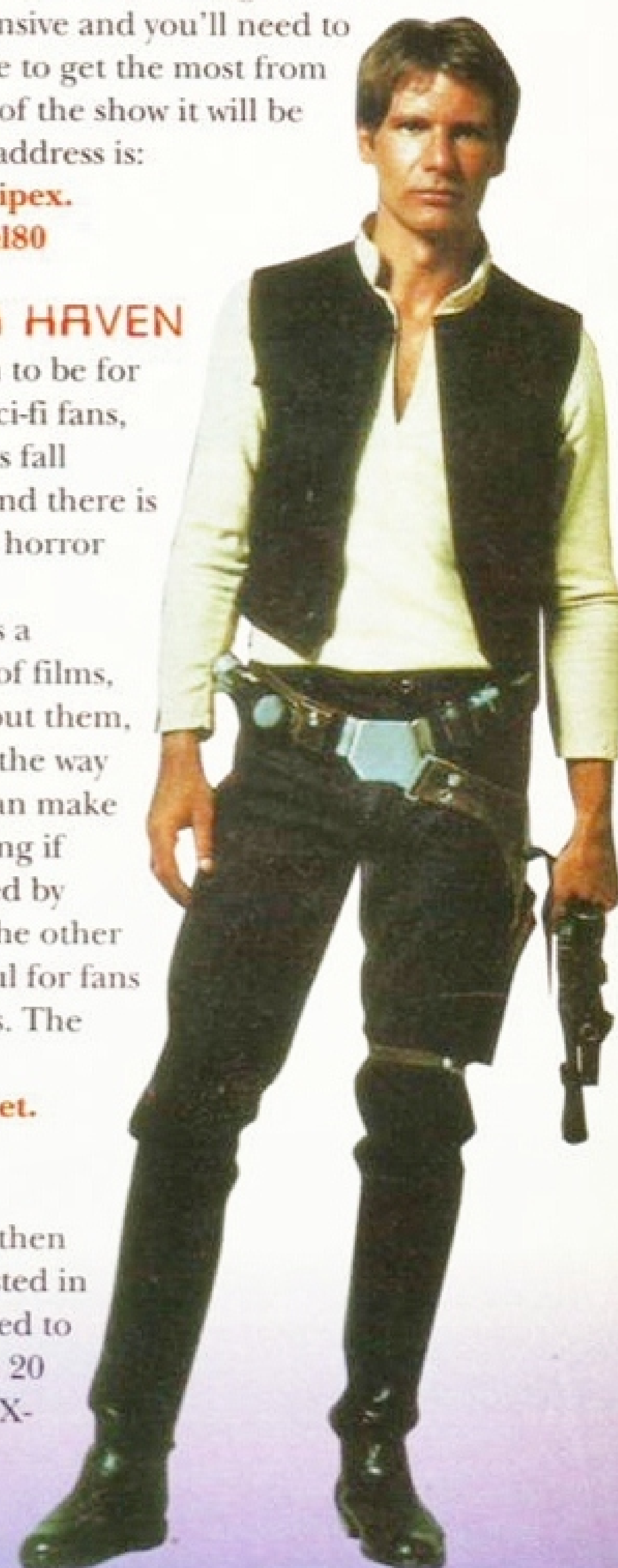
If you're a diehard Blake's 7 fan (and there are a few) then you should definitely check out this site.

THE HORROR HAVEN

This site would seem to be for horror rather than sci-fi fans, but many of the films fall under both genres and there is a section about sci-fi horror films.

Although there's a comprehensive lists of films, and information about them, there's not much in the way of graphics, which can make pretty boring browsing if you're only impressed by flashy pictures. On the other hand the site is useful for fans of trivia and statistics. The URL is:
http://www.magicnet.net/~tkearns/horror.html

If sci-fi is your thing then you might be interested in *SFX* – the mag devoted to science fiction. Issue 20 has features on The X-Files, Babylon 5 and Star Trek and it's in the shops now.



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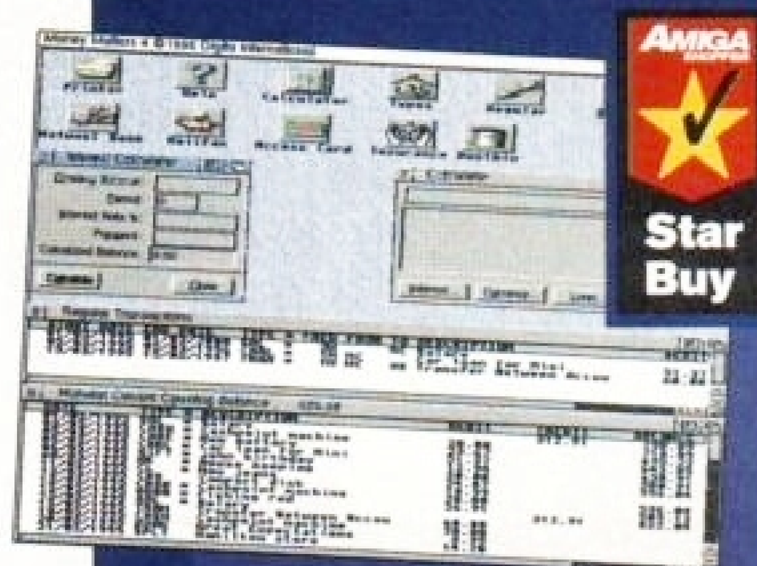
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When you subscribe to *Amiga Format* you'll receive your CD or DD compilation disc featuring *Money Matters 4, Wordworth 5 Special Edition, Organiser 2* and *Datastore 2*. All have a RRP of £49.99 so you're getting a great deal!



FREE COMPILATION DISC!

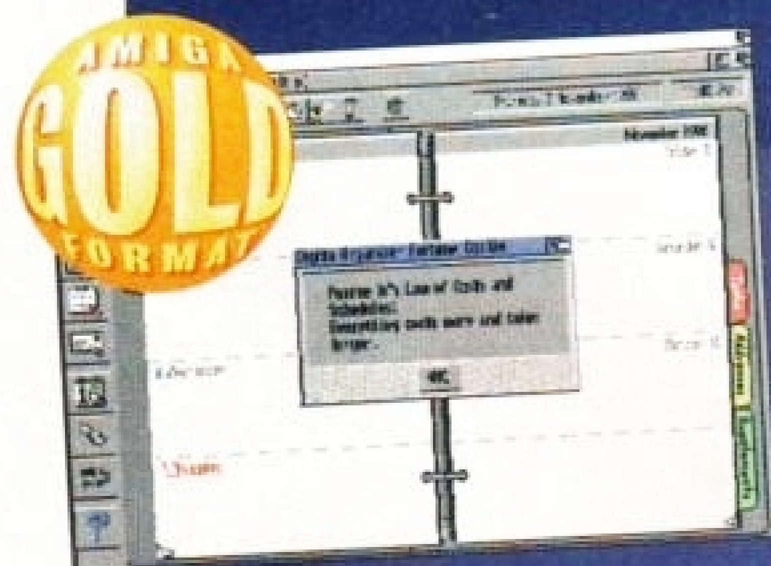




● MONEY MATTERS 4

Amiga Shopper 90%

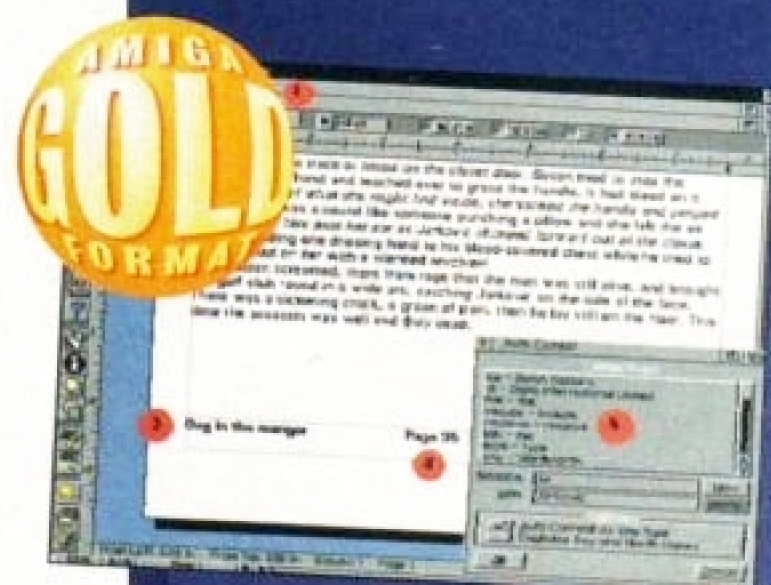
Keeping track of all your finances is easy with *Money Matters 4*. Winner of *Amiga Shopper's* Star Buy award, it's the ideal package for managing your personal or small business finances.



● ORGANISER 2

Amiga Format 92%

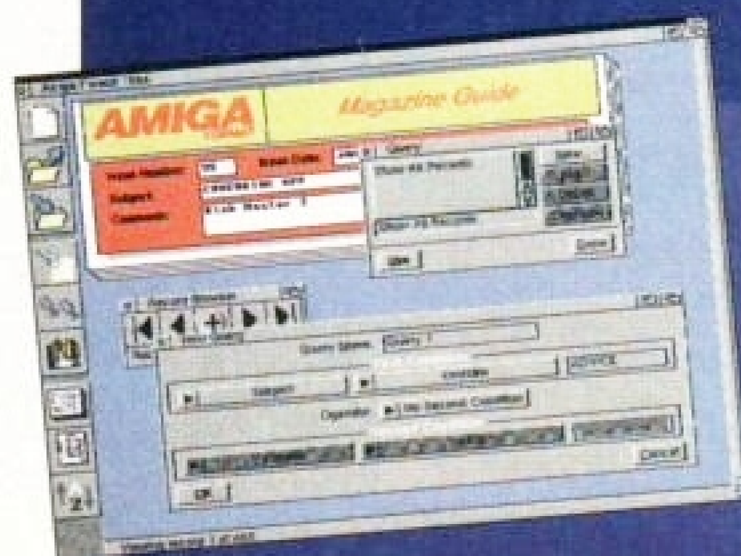
Described as the best Amiga PIM available, *Organiser 2* won an *Amiga Format* Gold award. With its simple interface and loads of clever features you'll have no excuse for ever forgetting anything again.



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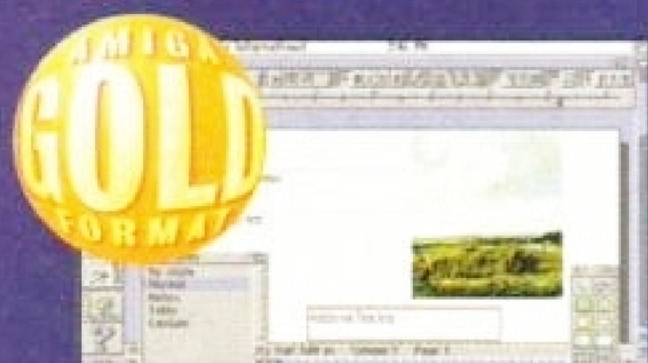
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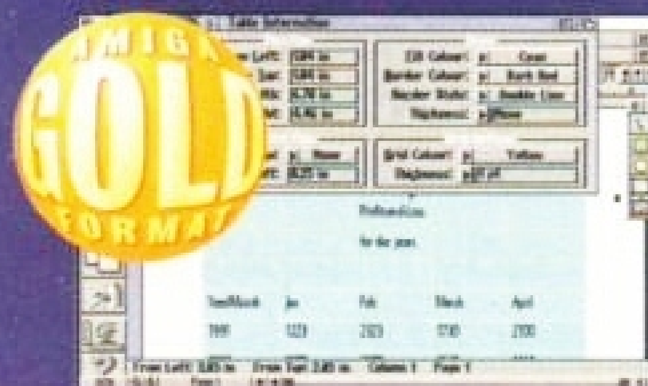
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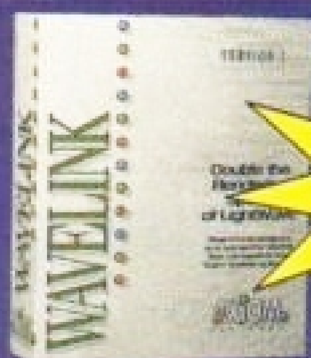
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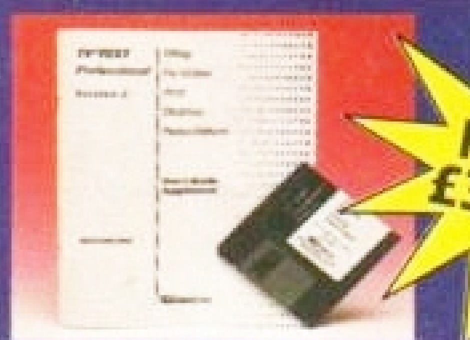
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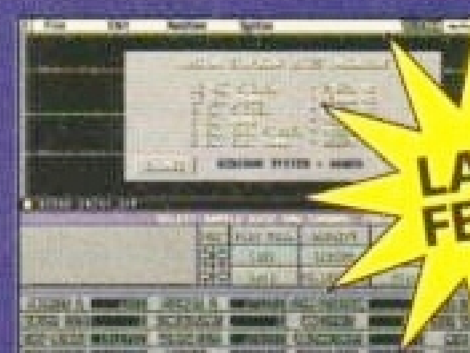
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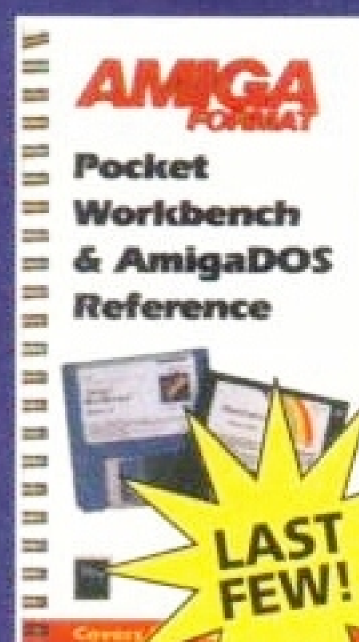
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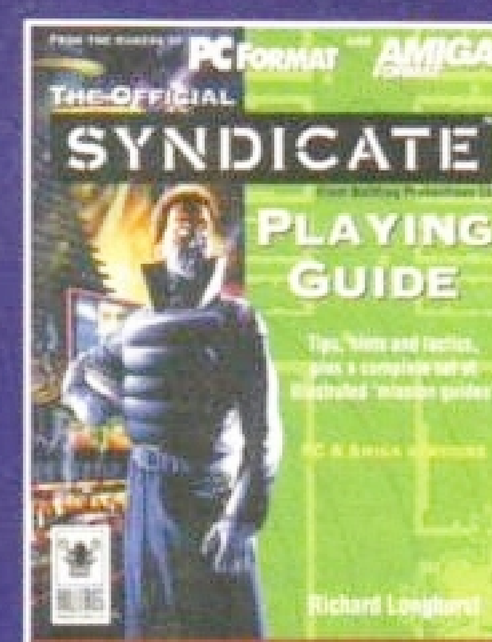


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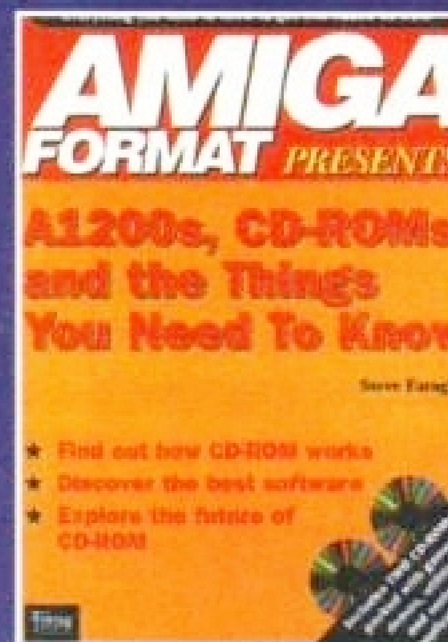
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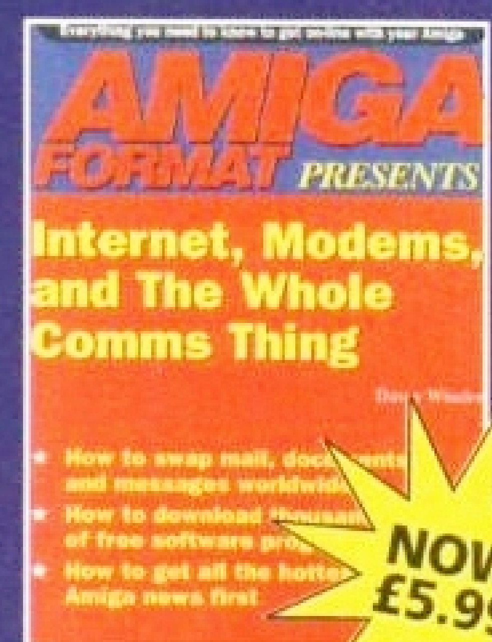
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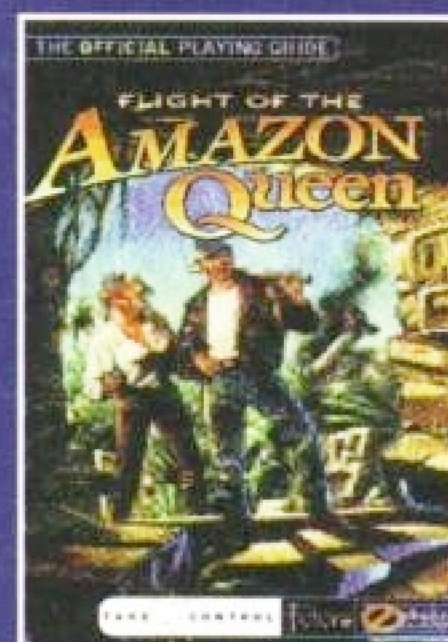
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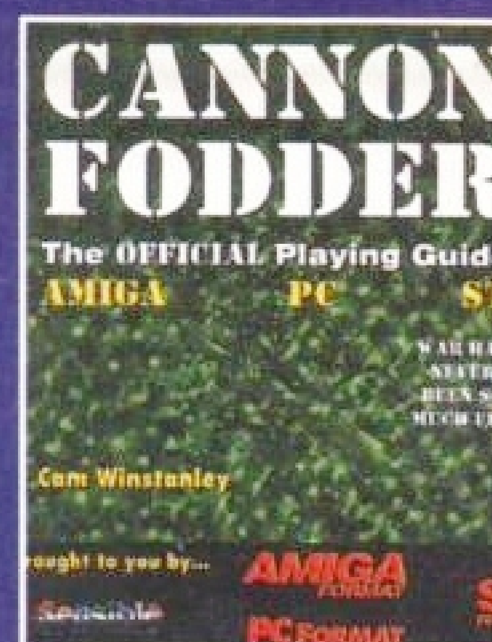
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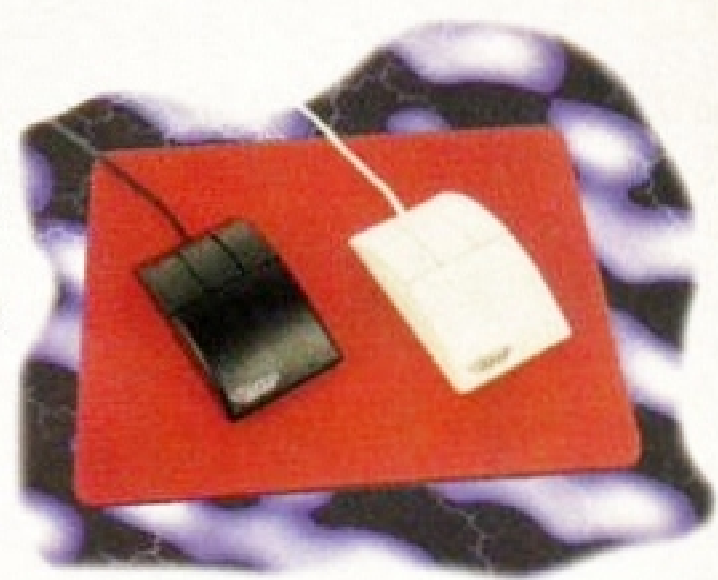
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AF CREATIVE



I think I must have upset the art people somehow, hence this picture (which I am sure they have evilly manipulated in some art package to make my gut look bigger). Still, it's all part of our new, friendly, people-oriented image.

And what could be more friendly than our tutorial section. Once again the foremost Amiga experts in the land have conspired to bring you the hints, tips and step by step instructions you need to get the most out of your Amiga. **Paul Overaa** is here to help all you ARexx programmers who can't see the trees for the wood, **Mr Vost** gets vocal about adding sound to your multimedia presentations and **Graeme**'s building a whole spacecraft! As if that wasn't enough to keep you occupied for a month, we've got the next part in our exclusive *Alien Breed 3D II* editor tutorial which explains how to join your vector objects together to form smooth animated baddies. **John Kennedy** has been having some infestation problems – there are bugs you don't want associated with a web browser but he's spent the month tidying up the things that have been driving him crackers (I knew I could get at least one Christmas reference in). Have a creative Christmas and see you in the New Year.

Nick Veitch

SEND IT IN!

We need your input. Is there something that you would like to see covered in one of the current tutorial series? Why not send your suggestion to us at the magazine. Here are some things you might like to think about:

AREXX

Commodore's excellent decision to include ARexx with Workbench was only matched by their stupidity in not documenting it properly. If you are having trouble why not write to us with a description of what you are trying to do?

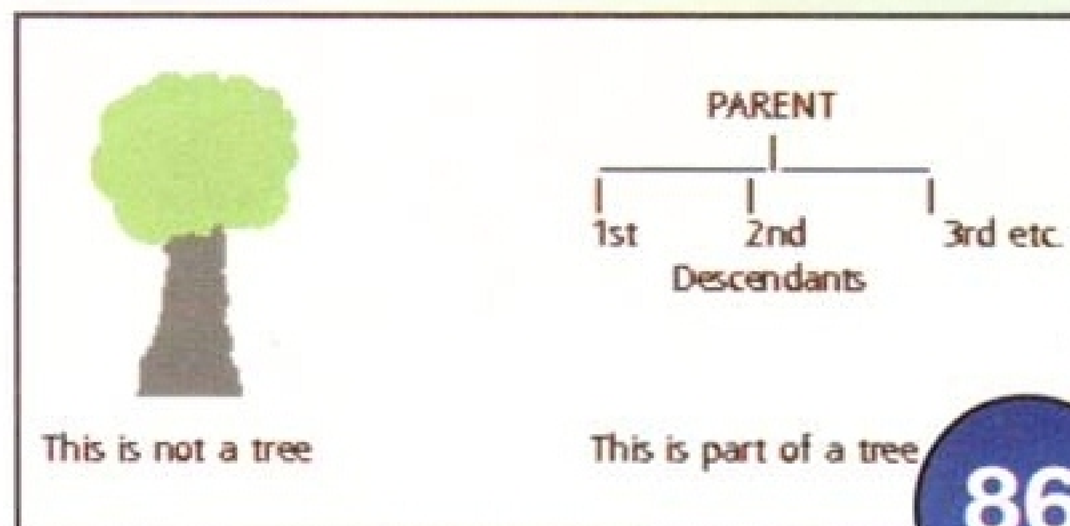
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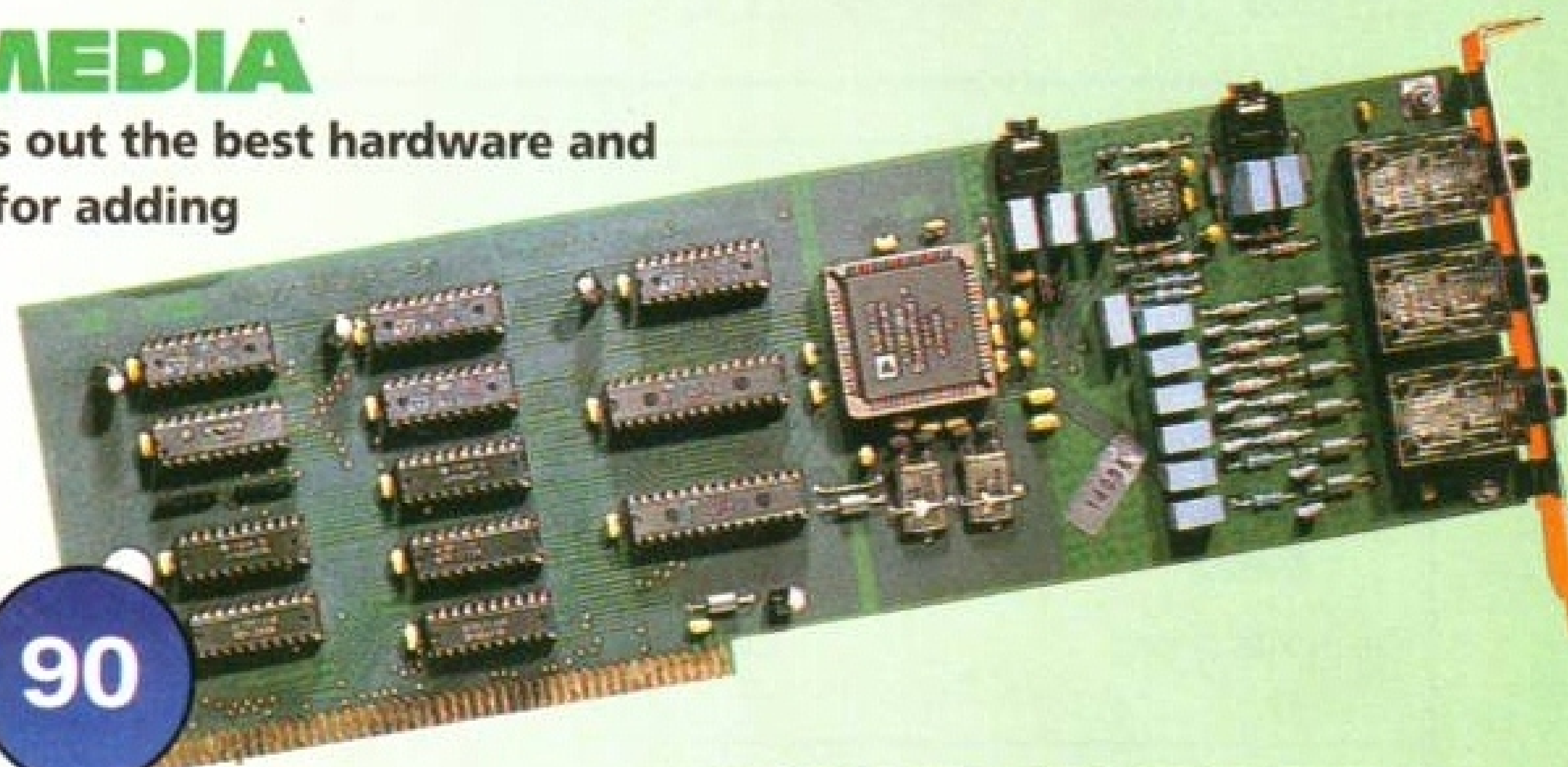
AREXX TUTORIAL

86

Recursive Tree Sorts may not mean much to you at the moment but they certainly will after you've read **Paul Overaa**'s comprehensive tutorial.

MULTIMEDIA

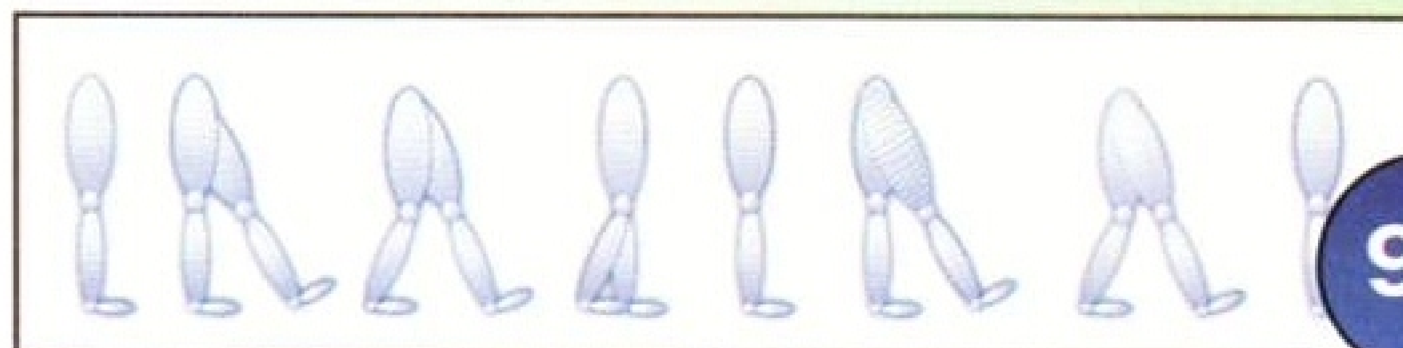
Ben Vost sounds out the best hardware and software to use for adding audio interaction to your own multimedia presentations.



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AB3D II EDITOR

These feet were made for walking. Apparently. Last month you made loads of vector objects, and this month we show you how to animate them.



92



REAL 3D 2

Graeme Sandiford concentrates on texture mapping in this month's tutorial and uses several different options to create his very own *Wipeout* spacecraft.

94



BLITZ BASIC

It's the World Wide Web, but not as we know it. **John Kennedy** continues his mission to produce a usable, stable web browser in Blitz Basic, and on the way, explains system calls and SuperBitMaps.

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Advanced ARexx Coding

Recursive Tree Sorts

Paul Overaa tackles an area that has been known to strike terror into the heart of many a programmer...

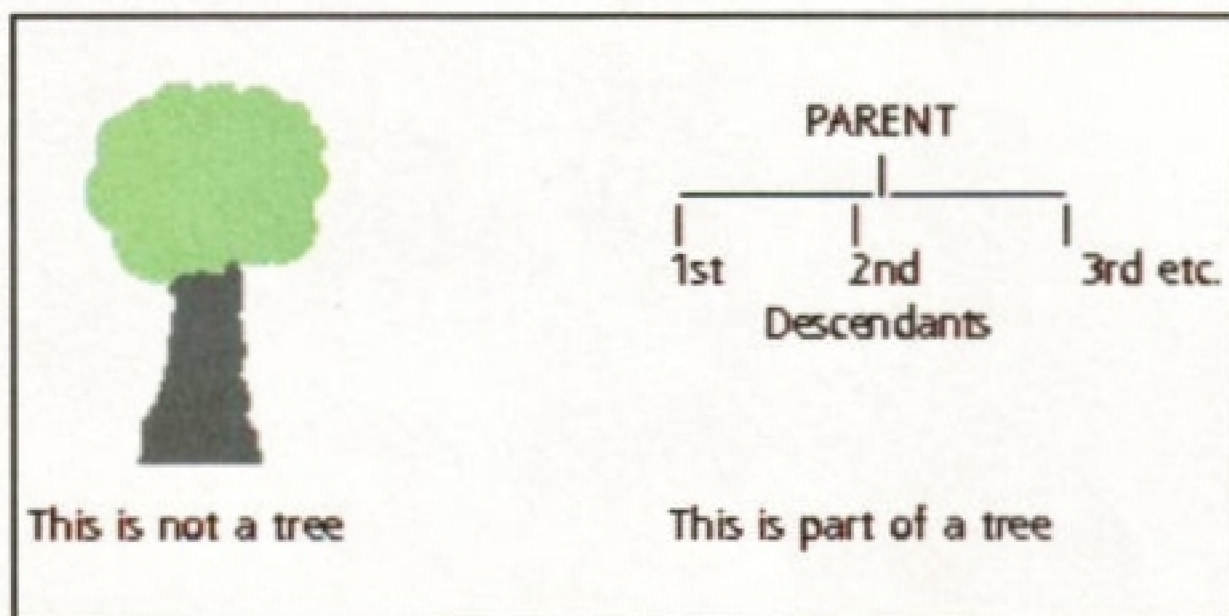


Figure One: We should all be familiar with the structure of a simple family tree.

Despite the fact that it is often used just for writing simple scripts and macros, ARexx is a language that, in many ways, is second to none. It has all the facilities expected of a modern day language supporting good flow control (including case style Select/When/Otherwise statements), and it allows the use of functions with local variables (using the Procedure keyword). The language also supports recursion, although chances are you will have found little evidence of this in the ARexx code normally seen. This two part tutorial should help set the record straight. I'm going to look not only at recursion but at an application of it that, hopefully, you'll find both interesting and useful.

The simple definition of a recursive routine is one that, in the course of its execution, ends up calling itself. One example where recursion can be used is in generating factorial numbers. These are numbers formed by successively multiplying the series of numbers generated by subtracting one from the current number itself. Factorial 5 for example (written 5!) is equal to 5x4x3x2x1, ie 120, and a recursive script for producing these sort of numbers can be found in **Listing One**.

Each time the Factorial() function calls itself, it uses a number one less than the value supplied. Routines which make these types of recursive calls have to include some kind of termination condition, to prevent them getting into endless loops, and with the factorial example the function stops calling itself when given the value 1. There's nothing wrong with the example as such – it works, like all recursive routines it's elegant, and above all short enough to be understandable.

The only problem is that to all intents and purposes – it's useless. Other than a few gamblers or mathematicians (who use factorial numbers for chance calculations) the only time most people ever need a script to generate factorial numbers... is simply to illustrate recursion! We need an example that has some practical everyday use and the topic I've chosen is "sorting". You might for example have a document containing a list of names and addresses that you want reorganised into postcode order, or names and telephone numbers that you'd like sorted into alphabetical order. You might even want to read a text file and, disregarding case, generate a separate file containing the individual words (again in alphabetical order) to help you generate an index.

There are a great many ways of sorting data but with ARexx the simple methods, such as the Bubble sort (which successively compares pairs of items and swaps them around if they are out of order), turn out to be far too slow. As it happens one of the best ways of sorting information is to use something called a recursive binary tree sort – although this method gets little exposure in most computing magazines. Why? Firstly because the method involves recursion, and secondly because it's often felt that tree data structures themselves are a little difficult to understand. In some ways they are but since in many cases their use can dramatically simplify programs, rather than complicate them, there's a lot to be gained from getting to grips with them.

LISTING ONE

```
/* factorial.rexx */
say 'Pick a number?'
pull x
f=Factorial(x)
say 'the factorial of' x 'is' f
exit

Factorial: Procedure
arg n
if n=1 then return(1)
return Factorial(n-1)*n
```

A script for generating factorial numbers

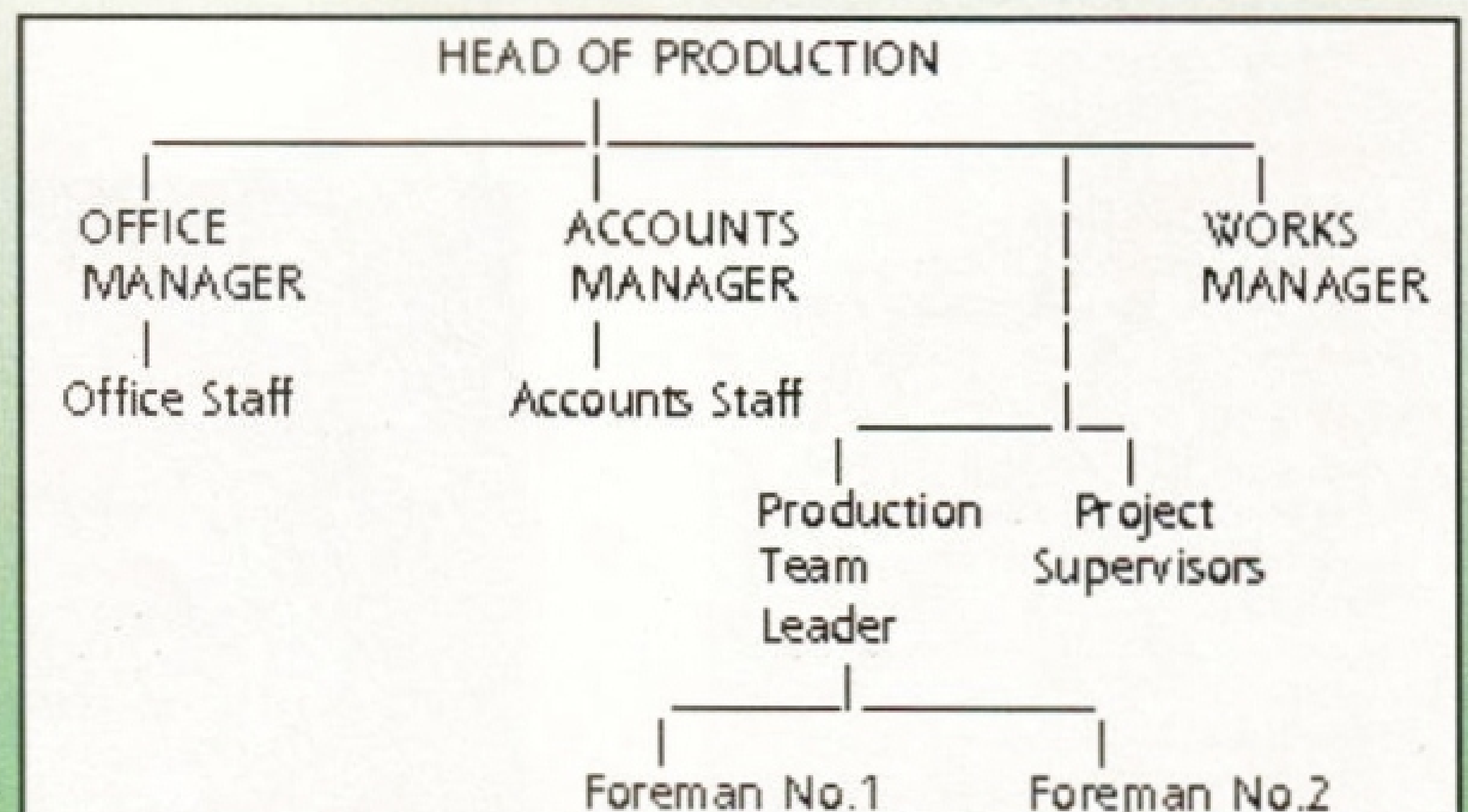


Figure Two: A tree showing the relationship between company staff members.

SORT TREES

The secret of becoming tree-literate is simple – you need to understand the basic concepts before trying to understand specific ARexx routines, so this is exactly where we're going to start. Now all of you will know what a "family tree" looks like, and that by convention they are drawn upside down (parents shown above their descendants and so on). **Figure One** gives the general idea and also attempts to confuse gardeners...

With a family tree we are describing the relations between the parents, their children, the descendants of those children and so on. Another common non-computing example of a tree is the management organisation chart such as that shown in **Figure Two**. Again the purpose is to show relations, this time between the various jobs or orders of responsibility within a company...

...their use can dramatically simplify programs rather than complicate them...

Key facts? Well, firstly, each item on the chart is related to only one item above it. We say that each item has only one parent, ie Foreman No.1 is responsible only to the Production Team Leader. Similarly the Production Team Leader is only responsible to the Works Manager. But there's no such restriction on the number of descendants that an item may have – the Production Team Leader for example has many Foremen who report directly to him.

In general then, for a structure to be classed as a tree, each item must have only one Parent but may have none, one, or many descendants. The only exception to this is the very first item in the tree, this will have descendants but no parent. This first item is given a special name... the "root" of the Tree.

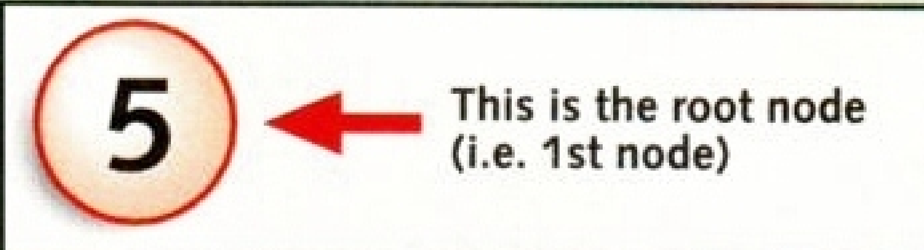
Now If all this terminology sounds familiar there's good reason – the AmigaDOS filing system is organised as a tree structure but before we start considering how tree structures are used in a computing sense we need to mention two last pieces of terminology. Firstly, each item in a tree is called a "node" so the first item for instance would usually be called the Root Node.

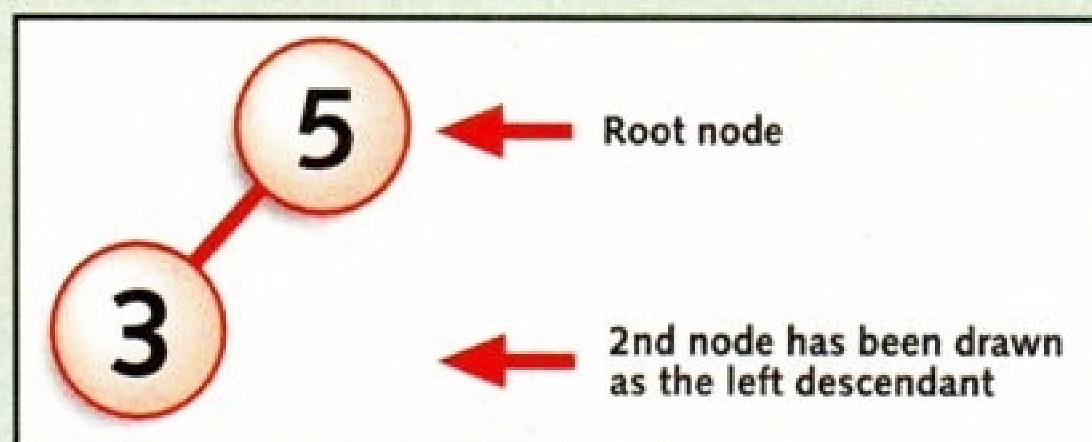
Secondly, if you pick a node on a tree and regard that as the root of a separate smaller tree then that small tree is known as the subtree related to that selected node!

BINARY TREES

If you restrict the maximum number of descendants that a particular node may have to two, you produce a structure called a "Binary Tree". The beauty of these is that you can, by building them according to chosen rules, cause the tree to effectively impose an order on the items placed on the tree. Let's for example take the list of numbers 5, 3, 1, 6 and 4 and place them onto a tree using the following rules: If the number being added is "less than or equal to the value of the node being examined" then move to the left descendant. If the number being added is "greater than the value of the node being examined" then move to the right descendant. As soon as a node is found where no suitable descendant exists – then that's where the new number will be stored!

The first step for tree creation is easy. We just draw a root node like this...



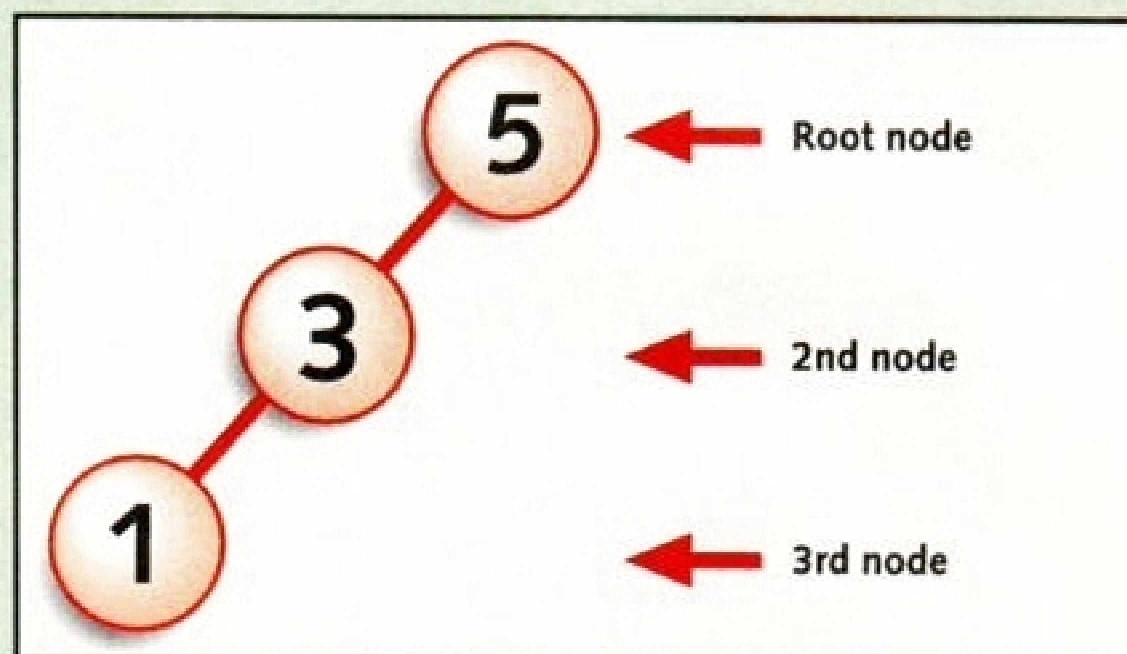


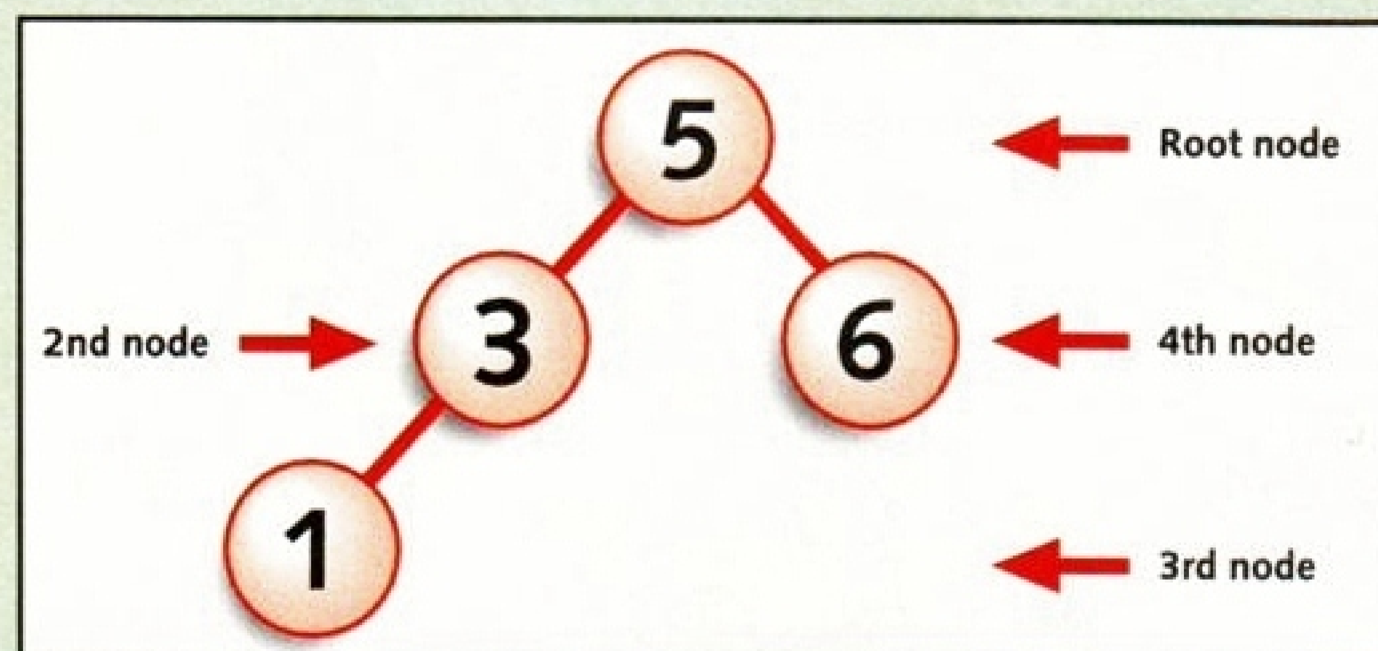


The next number in the list is 3 and, since our tree has only one item on it (and therefore has no descendants) we simply ask "is 3 less than or equal to 5" It is, so 3 gets drawn as the left descendant of the root node...



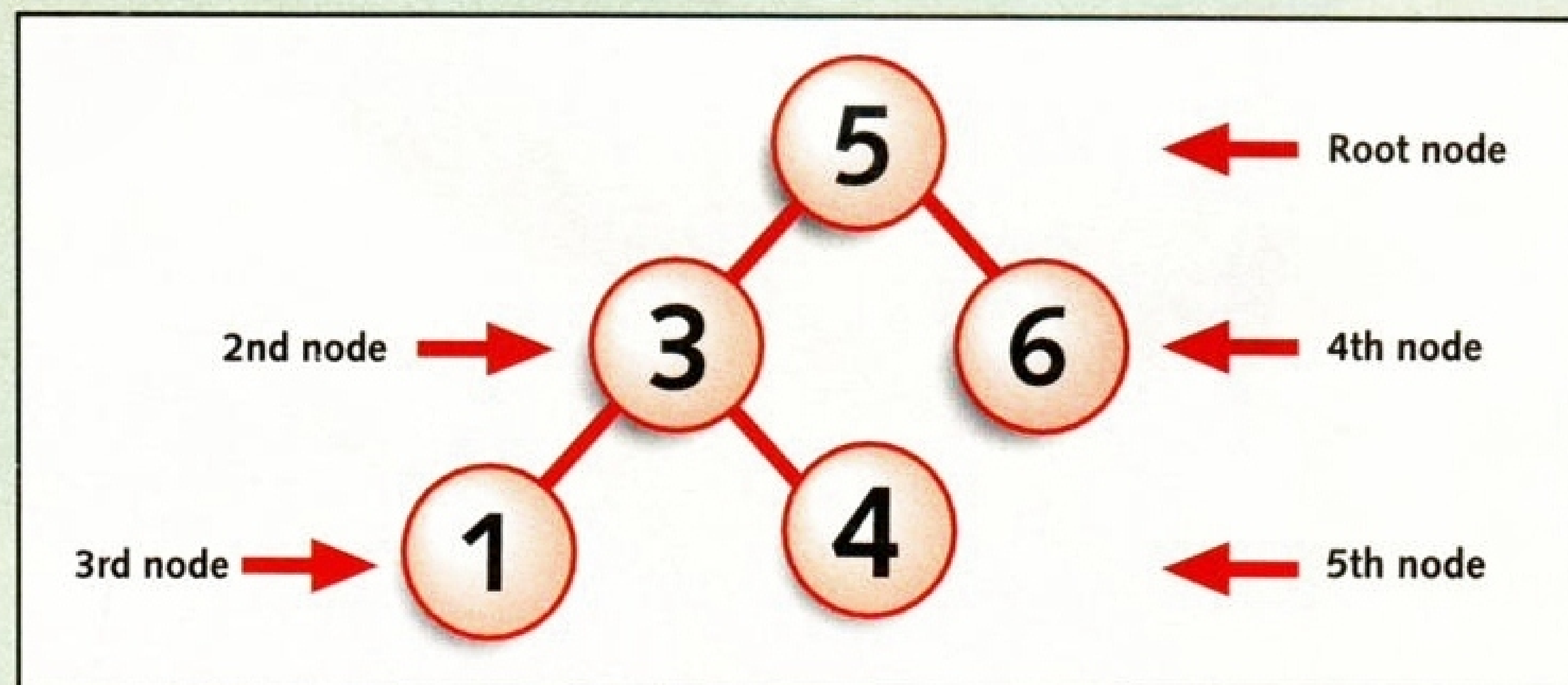
The third item in the list is the number 1 and to place this in its correct position here's what we do: First, the value of the new entry is compared with the value of the root node. Since 1 is less than 5 (the root) we look at the left descendant of the root which in this case is the number 3 the second item that we added to the tree. Since the value of the new entry is less than or equal to 3, and this node doesn't have a left descendant, this is where our latest entry, the number 1, will be stored...







Easy isn't it. And to add the fourth item in the list (the number 6) we follow exactly the same rules as before. In this case the number 6 is greater than that of the root and, since there's no right descendant present, we proceed by creating one like this...





To place the last item in our list onto our tree we compare it's value (4) to the value of the first node in the tree. Since 4 is less than 5 we then move to the left descendant of the root (which has a value of 3) and ask "is 4 less than or equal to 3?" Obviously not and, seeing that there is no right descendant of this node, we complete the tree by storing that last item as that right descendant...

And that's it – we've just created a sort tree.

Next Month: **We'll be drawing some more sort trees and looking at some example ARexx code...**

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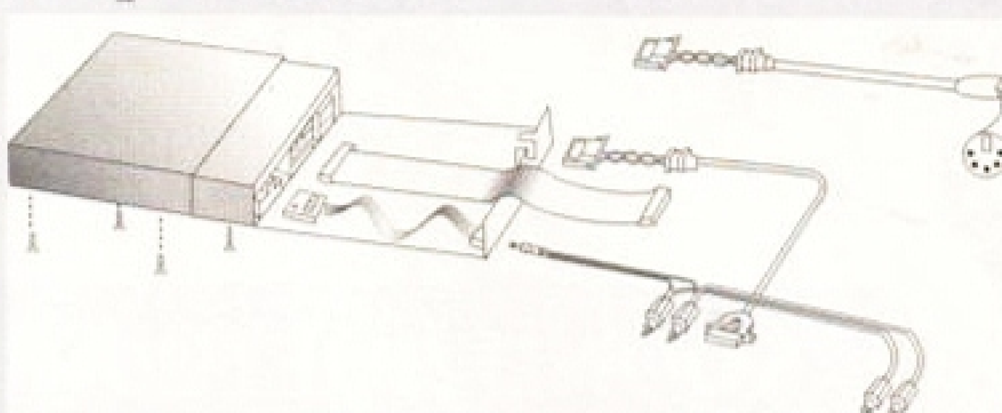
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It's Bath Time

No multimedia presentation is complete without sound. Ben Vost guides you through the software and hardware available for making music on your Amiga.

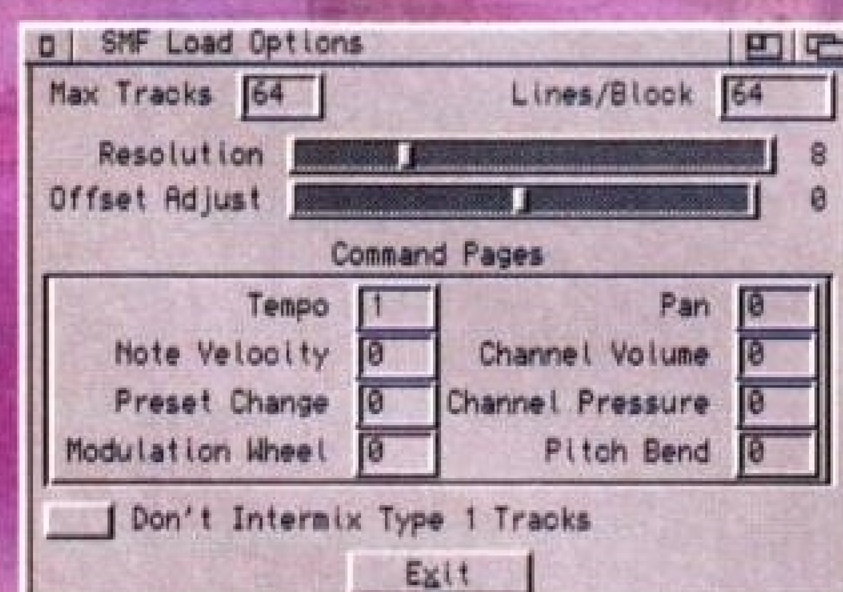
SOUND SOFTWARE

SOUNDPRO
HiSoft 01525 718181 £tba

This is a bit of a sneak preview really. The software hasn't quite been finished yet, although it may well be by the time you read this. It's a full-on sampling package that doesn't use some non-standard interface – everything is GadTools-based, and it has some really stunning editing tools. Stay tuned for more news about this great sounding piece of software.

OCTAMED SOUNDSTUDIO
RBF Software 169 Dale Valley Rd, Hollybrook, Southampton, SO16 6QX Prices vary

The Amiga musician's tool, *Soundstudio* also comes with a decent sample editing tool which supports quite a few different sound samplers, including 16-bit ones. Obviously it's also a cracking sound tracker program to boot.



Soundstudio will happily deal with MIDI files and it makes a good, although minimalist, MIDI sequencer.

SFX AMINET MUS/EDIT/

This shareware program does for sound samples what *ADPro* did for different graphics formats. It can handle almost any known file format and export them back out. It also has a wide range of tools that can be applied to the sound once it has been loaded. An excellent piece of software and nearly free to boot.



AFCD8: serious/shareware/music/directory



SFX is probably the most complete sample editor yet seen on the Amiga.

CONTENTS

Sound plays a very important, if somewhat subliminal, part in all our lives. A horror film becomes laughable without the tension-making strains of the violin, incongruous music can ruin a serious moment in a drama, and what would our lives be without our choice in music?

When it comes to synchronising sounds with pictures or animations, the Amiga has no peer. Even stacked PC systems start to choke a bit on a simple Scala slide show when combined with music or sound samples. But a pretty standard 030-based A1200 can cope with that kind of thing as easily as it does with loading Ed. This multimedia prowess means that your presentation can be an aural extravaganza, but be careful to note when to add sound and when not to.

One of the most important times to have sound, and something that a lot of "multimedia" CDs neglect, is in the area of feedback. Especially when you are dealing with graphical buttons that don't change colour or shape, a sound telling you that you have clicked is of paramount importance.

These sounds don't have to be (indeed, almost certainly shouldn't be) little tunes. They should just be simple clicks, the kind you could make just by fiddling with a waveform generator for a bit. If the button happens to represent something musical, for instance you are clicking on a guitar, then perhaps a strum sound would be appropriate, but other than that don't overwhelm your user. Leave the music subtle and you'll find it actually has a greater effect and is less likely to be "tuned out".

If you want to synchronise sounds with animations or video footage, that's a little harder on the Amiga. You can use a product like VLab Motion and Toccata to capture your footage and then save it back out as frames and a



Your presentation can be as majestic as the exhibition in this hall – with a little effort.





Bath's Royal Victoria Park has a bandstand that is usually filled with musicians all playing furiously on a Sunday morning – a great opportunity for a musical interlude in our presentation.

sound sample. You can then convert that into CDXL format (with difficulty as shown in last month's installment), but unless the package you are using supports CDXL this method isn't going to work. If you're really clever, you might be able to create an MPEG file with sound, but that's even harder work than converting into CDXL, and although packages like ImageVision and Scala support MPEG, they tend only to do so through a supported bit of playback hardware. Rightly so, since it is very difficult to get anything that looks even slightly nice if it has to be decoded through software on the Amiga.

SOUNDTRACKS

What about soundtracks though? How about a nice bit of .mod music playing in the background as you browse through the presentation. Well, yes, you can do this. Most multimedia packages like Scala and ImageVision support this kind of playback and even if they don't, it's a relatively easy process to load up a module player and then load your presentation. But you will need to watch out for one thing. Copyright theft. If you are creating your own original music then you are in the best position, but check the source of your samples all the same. If you are using tunes provided by someone else, make sure that you have their permission first and also ask them where they got their samples from. After all you don't want to be sued now do you? Unfortunately, the lure of that funky drummer sample or that little bit of Underworld means that we won't be putting any more reader MODs on the CD. The owners of the copyright wouldn't want to sue little old you in your bedroom when there's a profitable magazine publishing house that could afford substantial damages.

BE CAREFUL

So use .mods by all means, but be very careful about them. It's no use just saying, "oh no-one will notice", because they do. On that salutary note, it is worth mentioning at this point that the big music companies are trying to develop and implement a "digital fingerprinting" system for their music. It is supposed to be able to identify a copyrighted sample even if it is distorted, but personally, I don't see that it can work if you used a rubbish 8-bit sampler to pull the sounds off a disc and then manipulated it further in *SFX* or something. But that doesn't mean you should do it, right!

That really concludes our look at using sound within your presentation. There are further issues that will need to be examined but they really depend highly on what package you use to compile your presentation, so we'll wait until another chapter to deal with them.

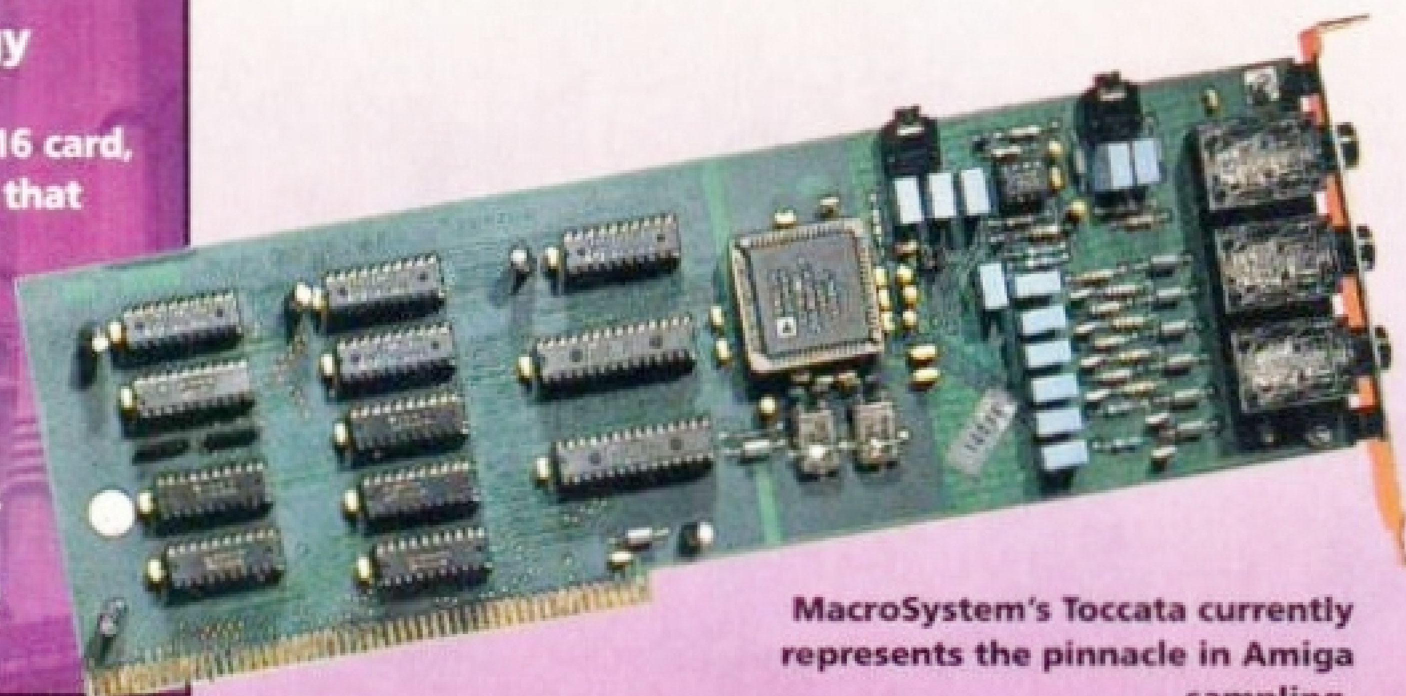
Next month we will be looking at special effects and how you can incorporate little features like wipes into your presentation. AF

DELFINA DSP
Blittersoft 01908 261466

I personally don't know that much about this card, but I've been told it is very good, if slightly underdeveloped. People in the know reckon that the next revision of this software from Blittersoft will see this DSP-based card taking the lead in Amiga sampling power.

TOCCATA
White Knight Technology 01920 822321

Like the now unavailable AD516 card, the Toccata is a Zorro II/III card that supports multiple 16-bit samples. Although the software to control it is a bit complex, like most MacroSystem products, the power behind it is undeniable. With top quality sound at CD rates, this is probably the best sampler on the market.



MacroSystem's Toccata currently represents the pinnacle in Amiga sampling.

HANDY HARDWARE

Sound samplers are looking a bit thin on the ground these days. There used to be quite a wide range of kit available across the price range, from Datel's little 8-bit job, through to the mid-range Perfect Sound III and the high-end 8-bit Audio Engineer. Top of the range, though, was the AD516 16-bit sampler from Sunrize. We have one in the office and they are like gold dust because they are so rare now. Out of the ones that are still available, you can choose between:

TECHNOSOUND TURBO PRO
Amiga Format offers £24.99

These are running out fast (I don't even know whether there'll be any left by the time you read this), but it's a good quality cheap 8-bit sound sampler. It has some great real-time effects which, while no good for us, can give you hours of pleasure talking like a dalek to your mum.

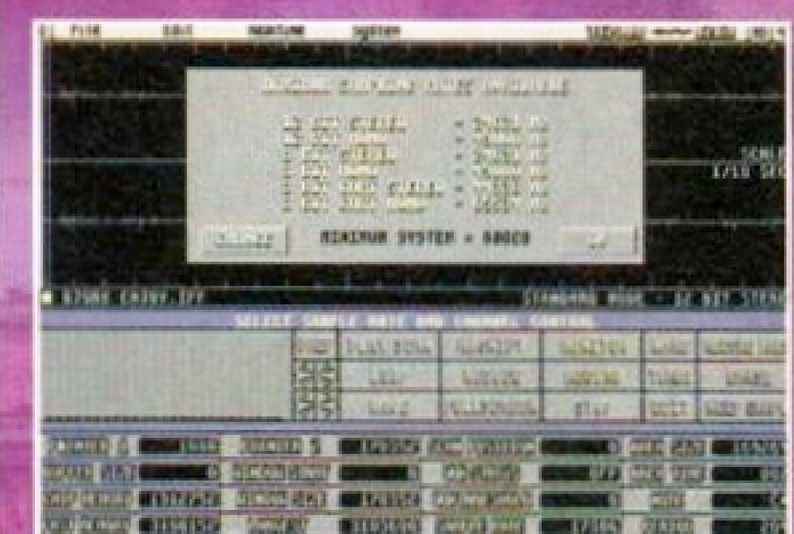


AURA
HiSoft 01525 718181 £99.95

Aura is a pseudo 16-bit sampler that plugs into the PCMCIA port on an A1200 or 600. It's a pseudo 16-bit sampler because if you sample using it, it can only achieve 12-bit accuracy, but if you load 16-bit samples it will deal with them internally in 16-bit, but play them back at 12-bit quality. Saving them out won't result in a loss of quality. Aura can sample and playback to and from a hard drive so there is no limit on the length of the sample you can hold, edit and playback.

MEGALOSOUND
HiSoft 01525 718181 £34.95

This is a descendant of the original stereo sound sampler – StereoMaster. If you are familiar with that product, you'll find no surprises here other than added features to the software. It's an 8-bit sound sampler ideal for creating standard IFF 8SVX sound samples.



LEVEL DESIGN TUTORIAL

Alien Breed 3D II

THE KILLING GROUNDS

Your monsters won't be very menacing unless they can move around. This month Andy Clitheroe guides you through animating a leg.

RESTRICTIONS ON OBJECT DESIGN IN THE ANIM EDITOR

Unfortunately you can have no more than 21 objects in any one project. Theoretically, you could have 32, but some of the machine code was hard-wired with the value 21, and some b**** infected my computer with a virus that formatted my hard drive and I forgot to back up the machine code bits. I could still make it 32 objects, but that would involve rewriting the horrible routines used in the core of the program, sorry.**

Part II – The AnimEditor

To see the vector object you designed in last month's tutorial in the game, you first have to load it into the animation editor and convert it into the correct format for the game.

1 Double click on the AnimEditor icon and wait for the program to load. The main editor screen looks and operates in a very similar manner to that of the object editor.

2 To load in your cube, or any other object, either press 'l' or select 'load object' from the project menu. Select the object you wish to load, and it will be loaded and displayed on the screen. To write this file out in the format that is required by *TKG* press 'w' or select 'write incbin' from the project menu.
(The name write incbin is left over from the very beginning of *Alien Breed 3D* when the vector objects were an included binary file – needless to say the files are now loaded in).

3 When you press 'w' you will be presented with a file requester in which you should specify the name of a file for this binary file. You will be asked if you wish repeated and unused points to be removed. Removing points means faster rendering times in the game but you can lose sharp edges between objects that have adjoining Gouraud shaded polygons, and the points are only checked for collision in the current frame, so if two points are in the same place in the current frame of an animation but not in others, they may be removed, causing the object to bend and stretch.

4 If you decide to remove the extra points, the project must be saved, so that it can be restored afterwards. Enter a name for the project and it will be saved. Note that a project actually consists of a directory of the name you specify, containing a file 'project', containing information about the project itself. When saving for the first time, you'll be asked if you wish to move the objects in the project into this new directory, this is advisable, otherwise your hard-drive will quickly become cluttered.

Part III – Animating a Leg

I have designed three simple components of a leg, saved as:

UpperLeg.obj
LowerLeg.obj
Foot.obj

Load these three objects into the AnimEditor and I'll take you through the simple steps involved in animating it.

1 To start with, the view looks a little cluttered, this is because the three objects have been loaded on top of one another. Select the lower leg, either by clicking near it with the right mouse button, or by using 'n' and 'p' (next & previous) to cycle through the objects. If you're not sure which object you have selected, press 'i' for additional information.

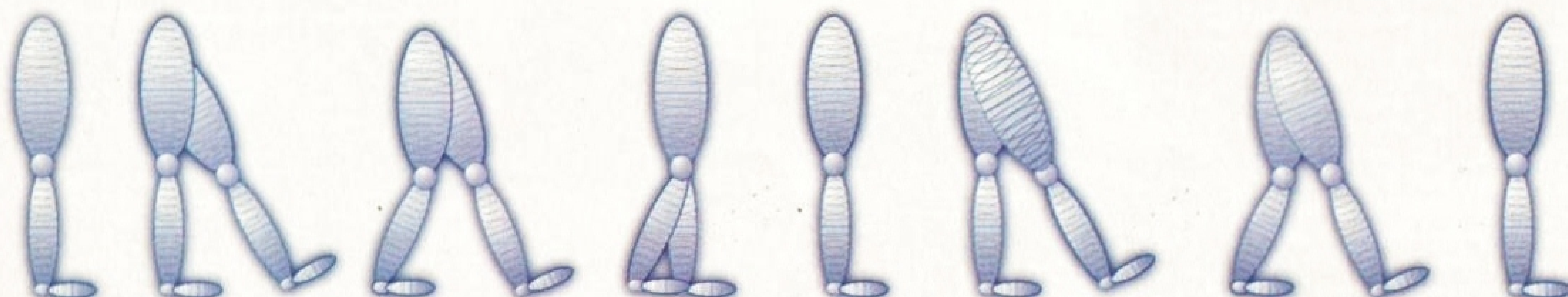
2 Using the view in the lower right window (side view) move the lower leg up and to the right of the foot, out of the way, by holding down the left mouse button over the lower right window and moving the mouse. Now do the same with the upper leg, moving it above and to the right. That should clear things up.

3 Rotate the perspective view through 90 degrees by holding down the left mouse button and moving the mouse so that the view is similar to the one directly below it.

Press the '=' key to zoom in a little, and use the cursor keys while the mouse pointer is over the bottom right window to centre the view again.

4 Now that we have our three leg parts, we want to attach them together at the knee and ankle. Press 'c' or select 'connect objects' from the menu to change to that mode. When two objects are connected, the child's axis is placed at the same coords as a specified point relative to the parent.

This point must be a point defined in the object editor, although it need not be used in any polygons. Such points are removed if the option is requested when writing out the file for *TKG*.





5 Select the foot object (the child) by clicking the right mouse button near it's centre. The foot wants to be joined to the left-most ankle point of the lower leg in the front view (lower left window). This is done by clicking on it with the left mouse button. If you want to use the perspective window, you can. Using the right mouse button to rotate the view will reveal all the points available for connection.

6 When you connect the objects together, the child will move to it's joined position with it's parent. If you connect the foot to the wrong place, you can disconnect the object again by pressing 'd' while it is still selected, then try again. Now select the lower leg and connect it to the left-most point at the bottom of the upper leg. This forms the knee and completes the leg.

7 Change to 'move object' mode by pressing 'm' or selecting the option from the mode menu. Now select the upper leg by clicking the right mouse button near its centre. If you have a faster computer (a bit of fast RAM will do) you can select the 'Update is Quick' option from the 'view' menu – it should change to 'Update is Informative'. You can do this on a slower A1200 as well, but the speed the screen updates will be reduced. Move the upper leg by moving the mouse whilst holding down the left mouse button until the foot stands on the floor (the orange axis), if you are using the 'Update is Informative' mode, the whole leg will move (because the lower leg and foot are children of the upper leg), if you are using the 'Update is Quick' mode, only the upper leg will move, with the lower leg and foot positions being updated when you release the mouse button. Note that you can move the axes around using the cursor keys so that you can see the whole leg.

8 We are now ready to animate the leg. First we need some more animation frames. Press 'f' or select 'set number of frames' from the animation menu. Type in 21 as the new number of frames. Frames added in this way are always added to the end of the animation and are exact copies of the previous last frame. If you type in a number that is less than the current number of frames, the frames will be deleted from the end of the current animation.

9 For a simple walk, all we need is four 'key frames', the rest of the frames can be generated by morphing or 'tweening' between these frames. We have the first frame already with the leg straight and the foot directly below us on the floor. We also need a frame with the leg stretched out in front, one stretched out behind, and one directly underneath us, but with the leg bent and the foot off the floor.

10 Go to frame 5 either by pressing 'g' or by selecting 'Goto frame...' from the anim menu, and typing 5. This frame can be the 'leg stretched out behind'. Change to 'rotate object' mode by pressing 'r' or selecting 'rotate object' from the mode menu.

11 Select the upper leg by clicking the right mouse button near the middle of it, then with the mouse over the lower right window, hold down the left mouse button to rotate the leg to about 30 degrees behind, select the lower leg and bend it slightly as well so the leg isn't quite straight.

12 Go to frame 10 using the same method as before. This frame will be the one with the leg directly beneath the body, but bent. Select the upper leg, and rotate it forwards a little, then select the lower leg and rotate it backwards. You should notice at this point that the lower leg no longer rotates along with the upper leg, instead it stays vertical, this is because the rotation of objects is only linked if, at the time of connection, the axes pointed in the same direction, and the child object has not been rotated independently. Once you have rotated both leg objects, rotate the foot so the sole points backwards slightly.

13 Go to frame 15 using the method as before. This will be the frame with the leg stretched out in front. Rotate the upper leg to about 30 degrees in front, rotate the lower leg so it appears straight again. Rotate the foot so that the sole is perpendicular to the rest of the leg. We want the foot to be on the floor in both frames 5 and 15. Select the upper leg and change to 'move object' mode (press 'm' or select it from the mode menu). Now move the leg down slightly until the foot touches the floor. Go to frame 5 and do the same.

14 All that remains is to create the in between frames. We have to morph between frames 1 and 5, then frames 5 and 10, then frames 10 and 15, then frames 15 and 1. Note however, that it is not possible to morph between frames 15 and 1, this is why 21 frames were created instead of 20. We simply morph between frames 15 and 21 (which is the same as frame 1) and then delete frame 21.

15 Morphing is achieved by pressing 't' (for tween) or by selecting 'Object Tweening' from the animation menu. You will be asked which objects you wish to tween, all of them (press 'a') or just the selected ones (press 's'). We want to tween them all, so press 'a'. Next you will be asked for the start and end tweening frames. Type 1 (then press return) then type 5 (and press return). You can also set acceleration and deceleration frames, useful for really smooth animations, but not required here, enter zero in both these requests. The first 5 frames have just been tweened. Repeat this for the other 3 ranges given above.

16 Finally, we want to delete the last frame. Press 'f' or select 'Set number of Frames' from the animation menu. Type in 20 and press return. As you will be destroying a frame, you will be asked to confirm your request by pressing 'y'. The animation is complete. Press 'a' to view the animation. You have successfully completed your first animation. Okay, so it's not very complex, and it looks a bit silly with only one leg, but it's a start.

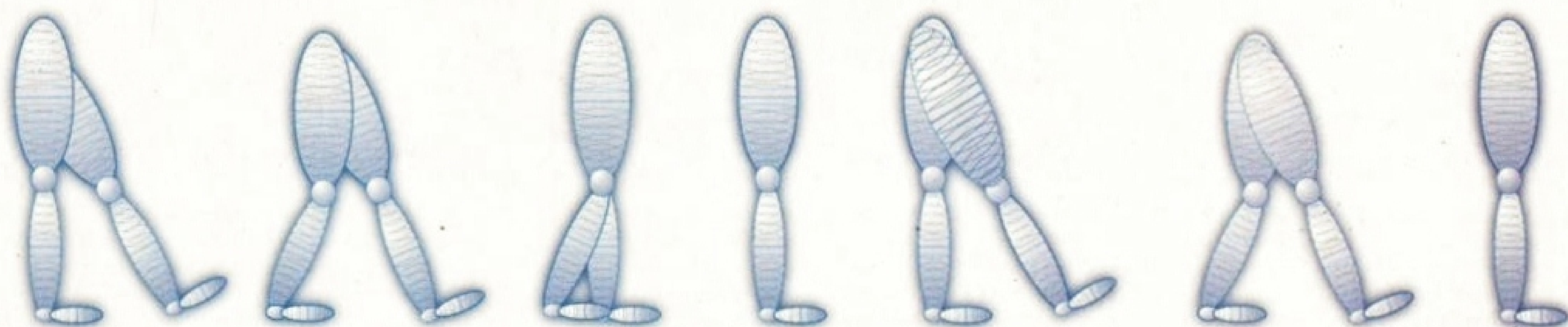
I've covered most of the basics in the editors, there are others, all of which are fairly obvious or simple to understand, and all of which are documented in the on-line help, available by pressing the 'help' key.

CREDITS

- Program design & coding — *Charles Blessing*
- Object Design — *Charles Blessing*
- Alien Design — *Micheal Green*
- Textures — *Micheal Green*
- Music — *Ben Chanter*
- Switch Design — *Andy Clitheroe*

DISCLAIMER

Before anybody starts complaining, this is not a fully featured rendering package, nor even a partly featured object designer package, you're getting it FREE with TKG, it may blow up occasionally, it probably has a few unfixed bugs, but don't blame me, I won't be held responsible if you loose a few hours work, because I did and I don't have anyone to complain to.



Real 3D Version 2

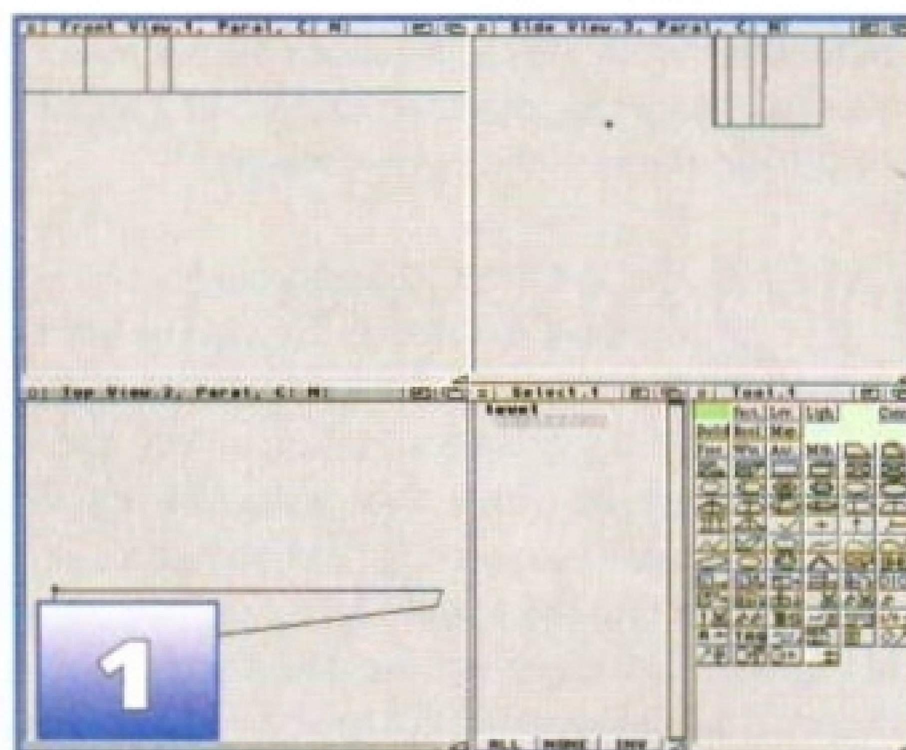
After hours glued to his computer screen playing *Wipeout*, Graeme Sandiford decides to create his very own racing spacecraft.

WIPEOUT

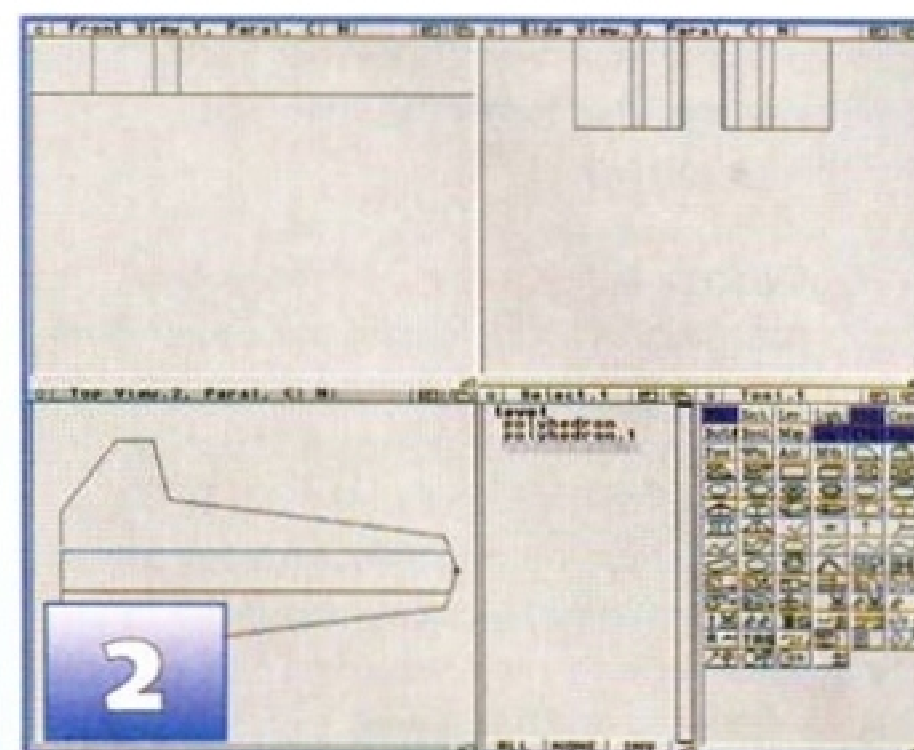
This month's tutorial is inspired by a recent video game release (the new version of *Wipeout*) and is a good all-round exercise and tour of *Real 3D2*'s features. The modelling side of things is pretty straightforward and, by now, you should have enough experience to manage it by yourself.

The focus this month is really on texture mapping and we will be using several types and options. We'll be applying a basic colour map, a bump map and several small colour maps (also called decaling). The decaling we will be doing uses the transparency and scope masking abilities of *Real 3D* to allow textures in the same level to show through. The Exclusive option will stop the program from trying to average out the maps as it does by default.

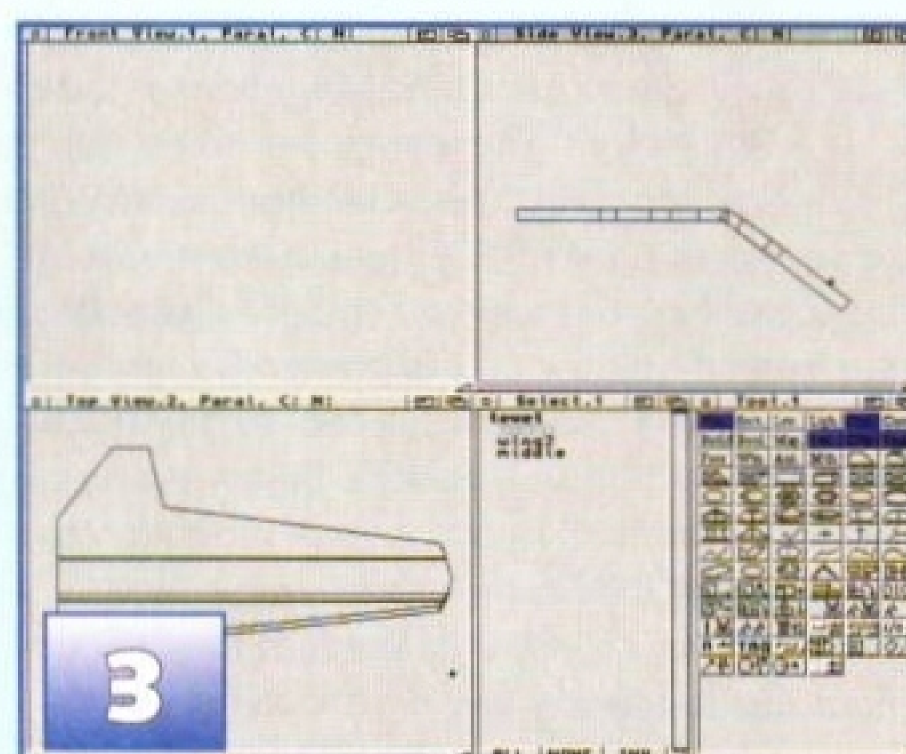
The power of the bump maps is determined by using the Bump Height slider. The most important thing to remember is that textures are automatically applied to all the objects in the level that they are placed. This means you may need to create new levels for objects and their textures. In some areas the instructions are slightly ambiguous, this is deliberate – use your creativity to make your model unique!



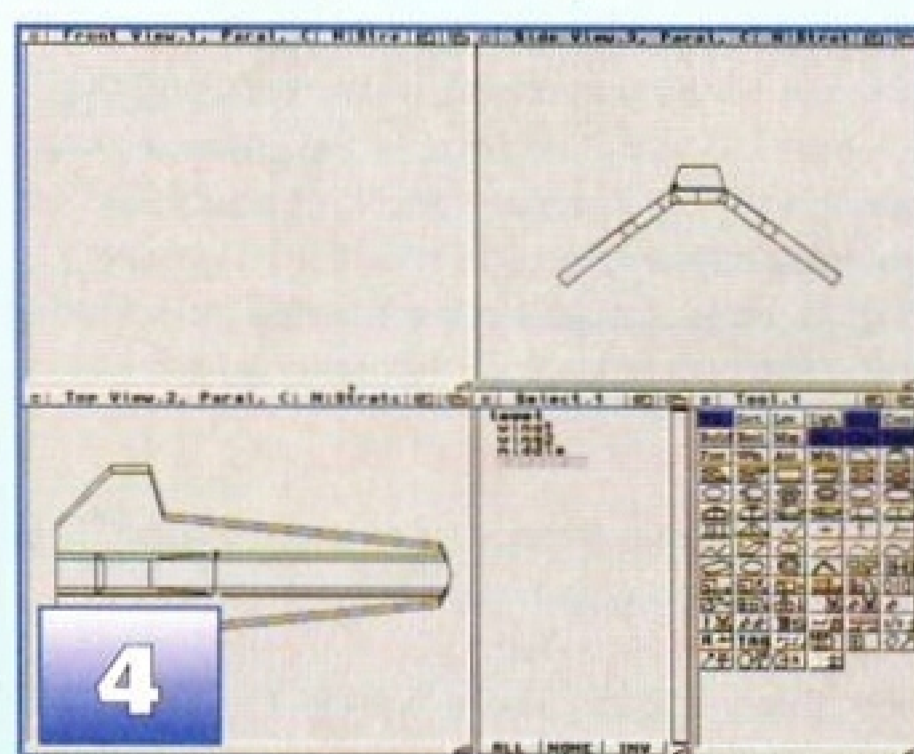
Open a standard tri-view environment and select the Polyhedron Visible tool. Draw a wing shape as in the picture – left-click to define a point and right-click when you're finished. Select the menu Modify/Structure/Duplicate.



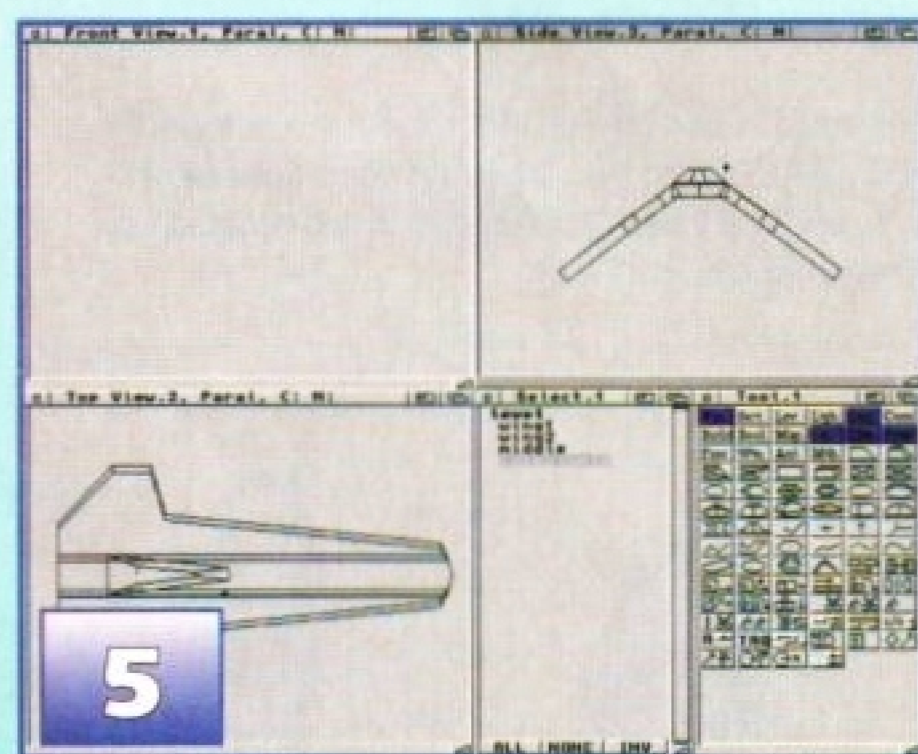
Give them suitable names and select the menu Modify/Linear/Mirror and draw a horizontal line above the wing and left-click twice. Draw another Polyhedron between these two using the drag-box to make sure they fit seamlessly.



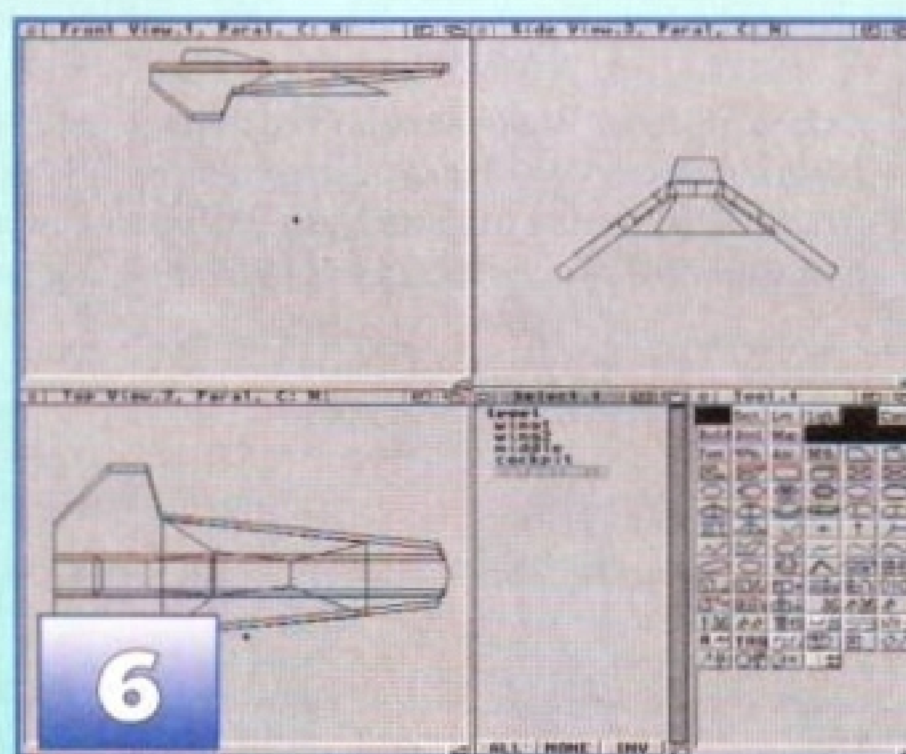
Your wings will probably be too thick, so select all the objects and Stretch them until they are the right thickness. Select the Rotate tool and draw a line along the top of one of the wings in the side view and rotate it as shown.



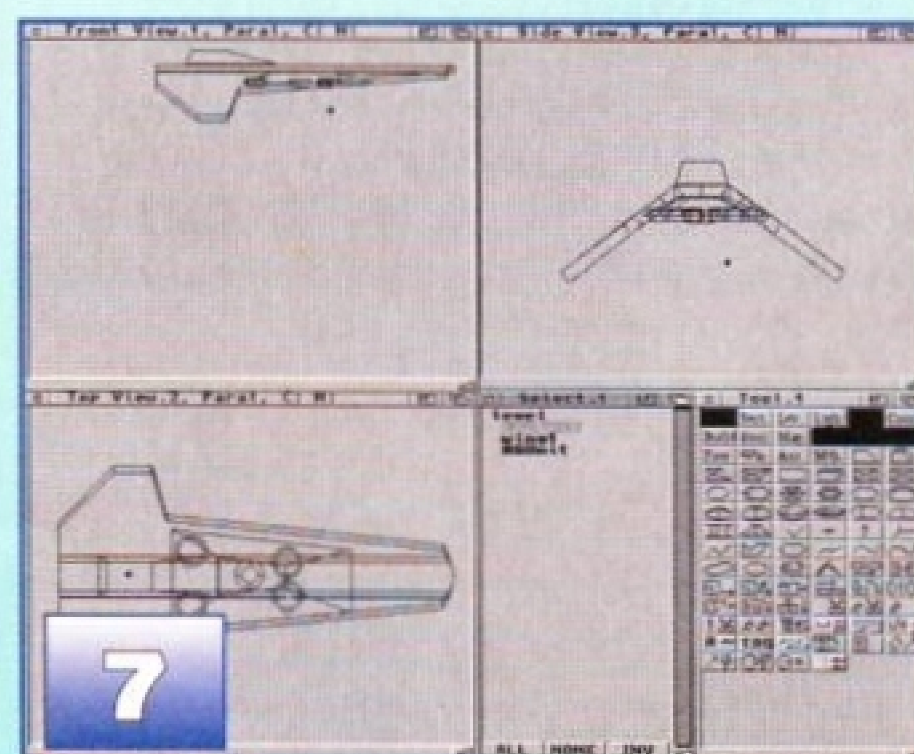
Do the same with the other wing and make sure there are no gaps between. Now for the cockpit. Select the Cutpyramid visible and go to the top-view. Draw an oblong towards the rear of the craft and another inside of it when prompted.



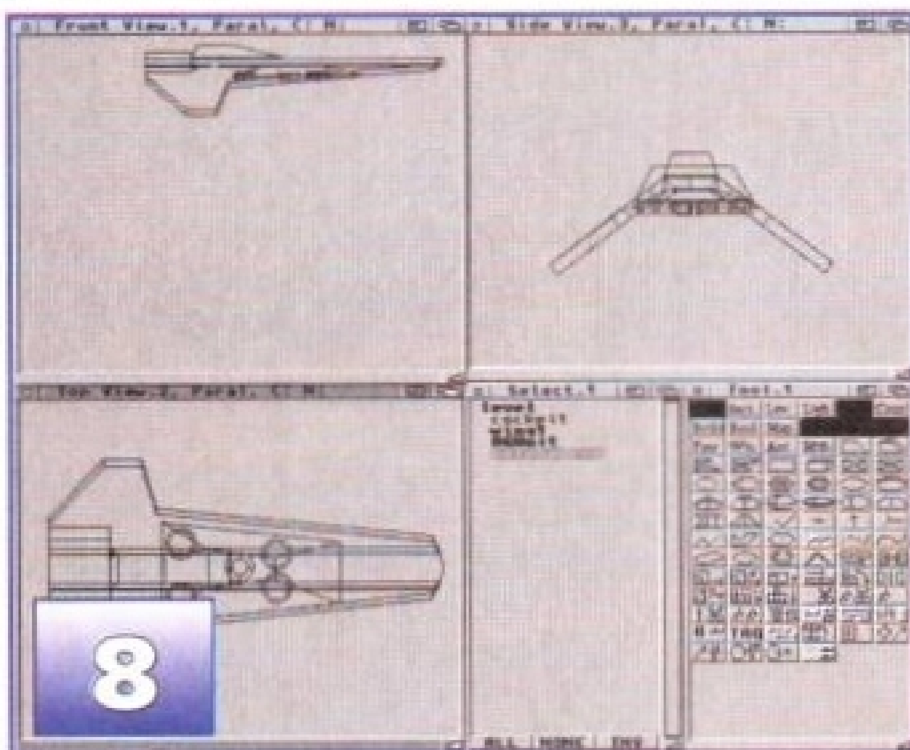
The second oblong should be positioned toward the back of the first. Stretch the cockpit until you're happy with the proportions and then name it. If you want that streamlined look try using the Cutpolymid and make the front narrower.



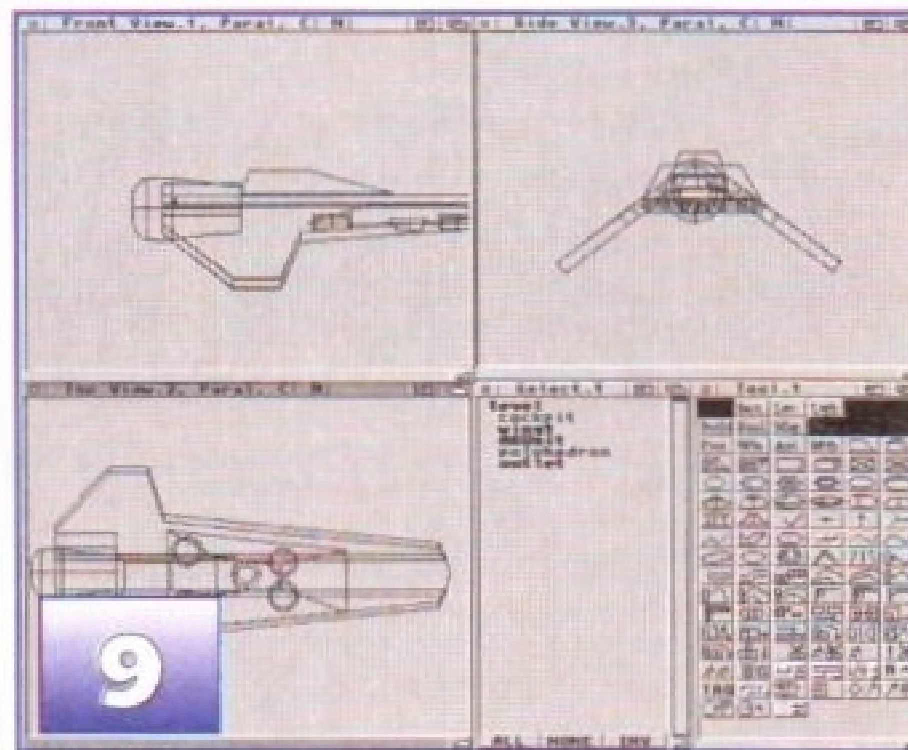
To make the craft more solid, and enable it to float of course, add an anti-gravity unit. Start by drawing a Cutpolymid in the top-view in the middle of the craft. Make sure that the top part is no wider than the middle strip.



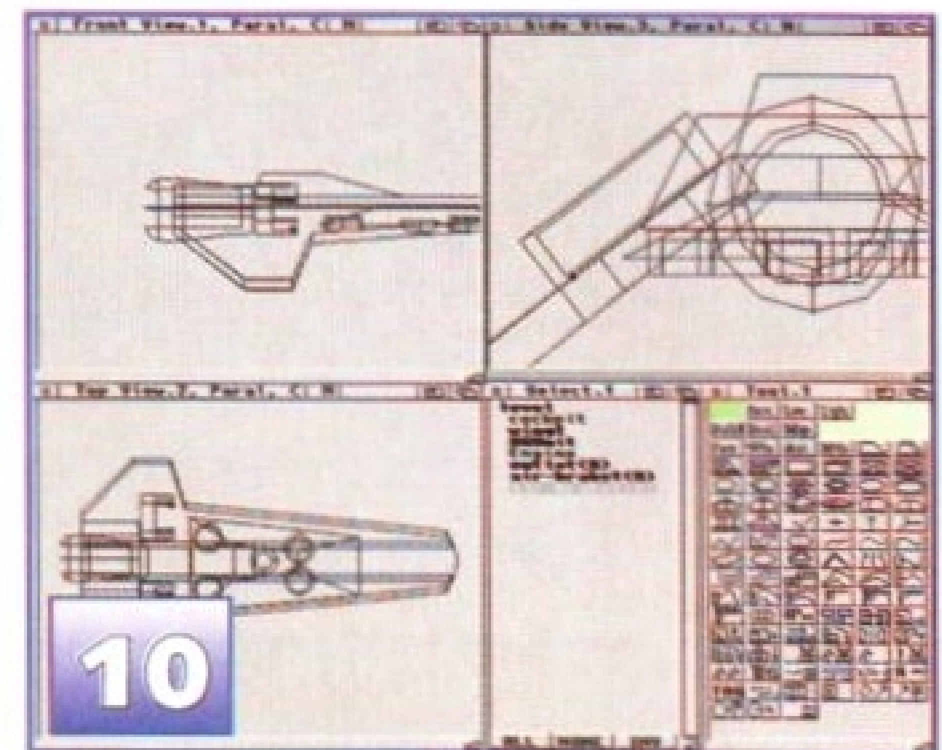
If part of the ag unit is showing from the front-view then resize and stretch until you're happy. Make it a dark colour and then select your wings and the middle strip and select the menu Create/Boolean/Or to create a single object.



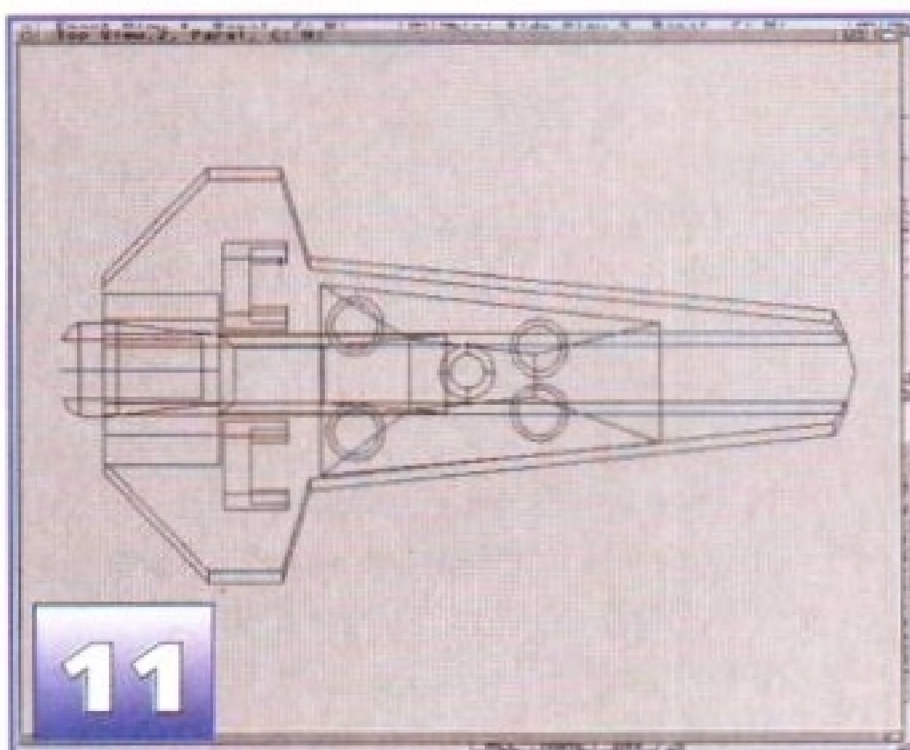
To add some more detail to our ag unit draw some Cylinders and Cut ellipses that protrude a little from the bottom of the unit – use Cylinders inside of Cylinders with the Boolean AND NOT to make them hollow and OR to make them one object.



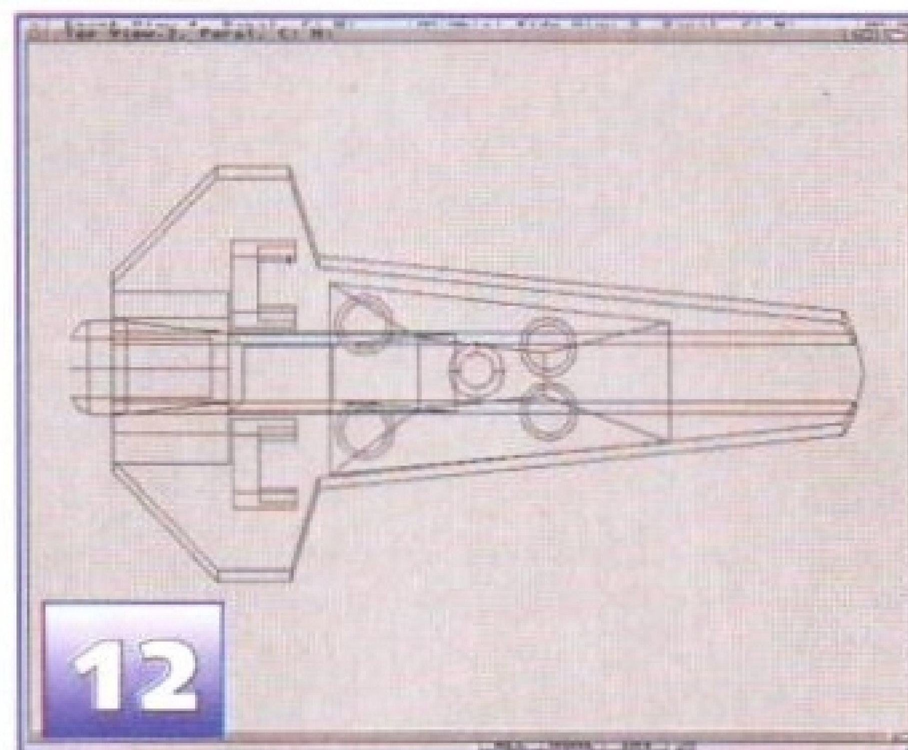
Now for the engine. This sounds dangerous, but create a simple block behind the cockpit – for the main part of the engines. Use a Polyhedron for this. Don't make it too big and make it flush with the rear of the craft – anything else should be ok.



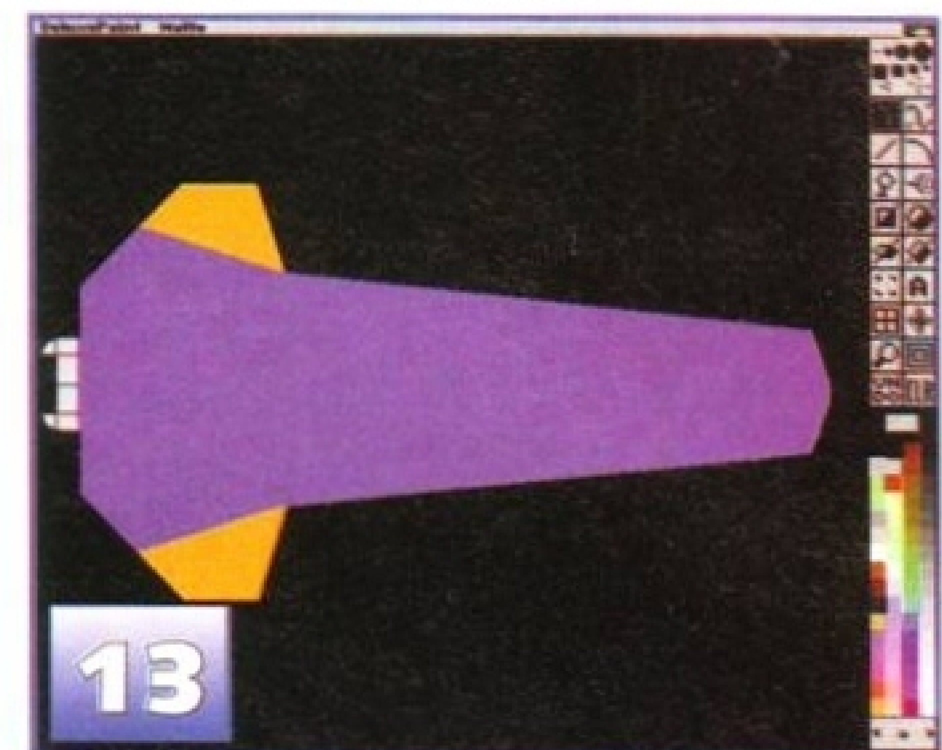
Now for the engine-outlet (exhaust thing). Use the Lathe tool to draw the pipe and make the end either flared or tapered – remember one right-click makes the next line you draw curved. If you like you can even make two smaller outlets instead.



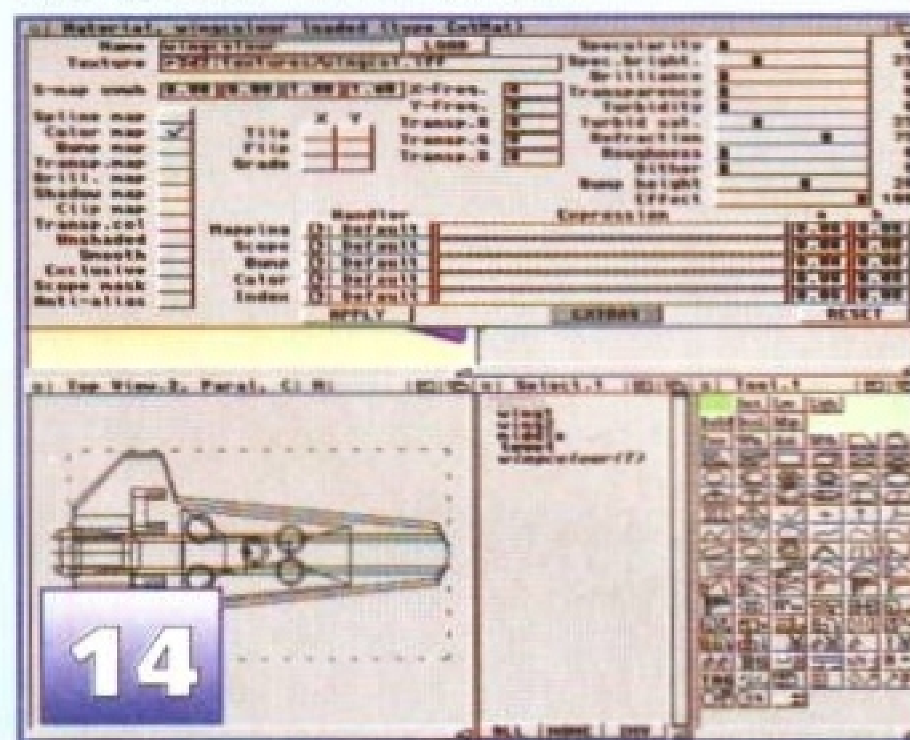
Create a Cylinder and place it inside the outlet and use AND NOT to make it hollow. Draw a basic Polyhedron or even a Cube on each wing and make the front-facing end hollow using a cube and the AND NOT trick – voila air brakes.



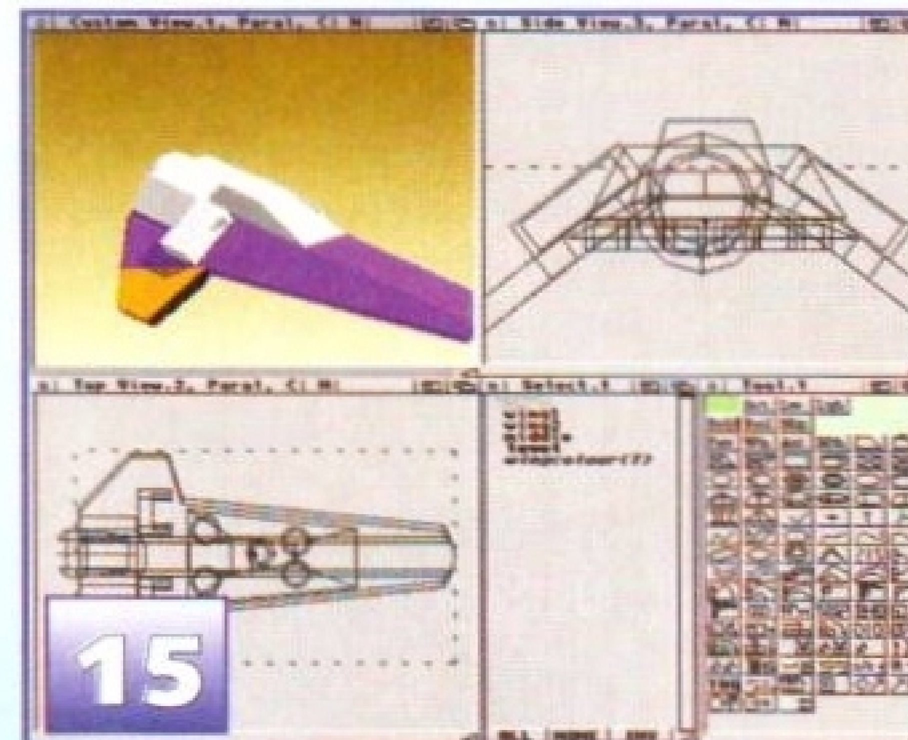
This sounds a strange thing to do, but open up the top-view really big and go to the menu Project/Environment/Save Screen or use a screen-grabber. Then load the image into your favourite paint package.



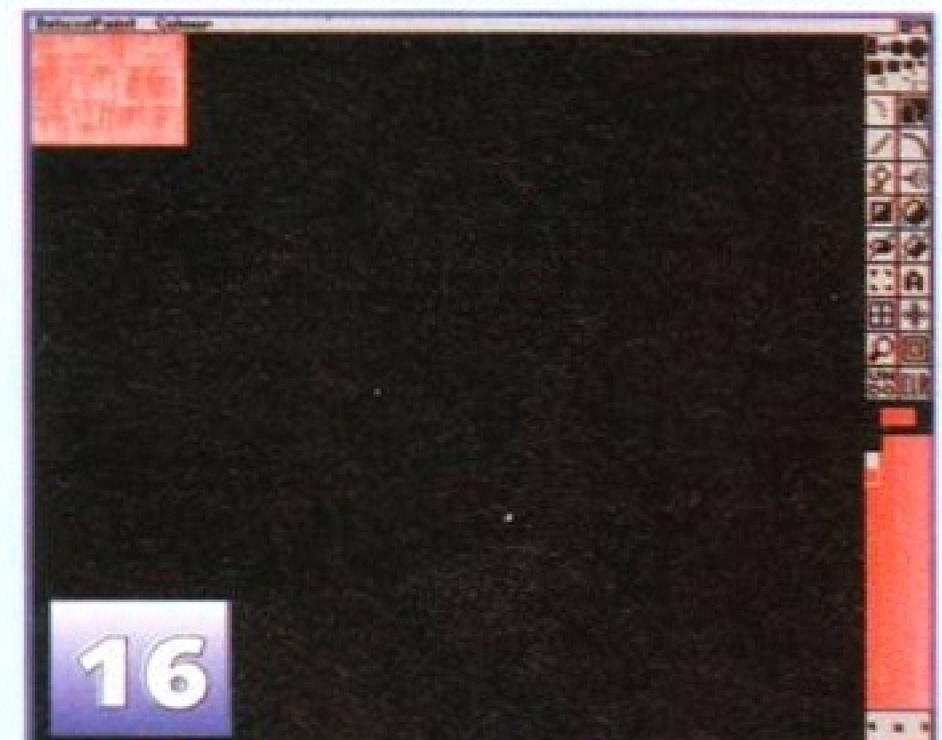
Fill in the image of the craft with a solid colour – whatever takes your fancy but bright primary colours tend to work best. Add some more large areas of colour for some variety and if you like some fine detail, although that can be added later.



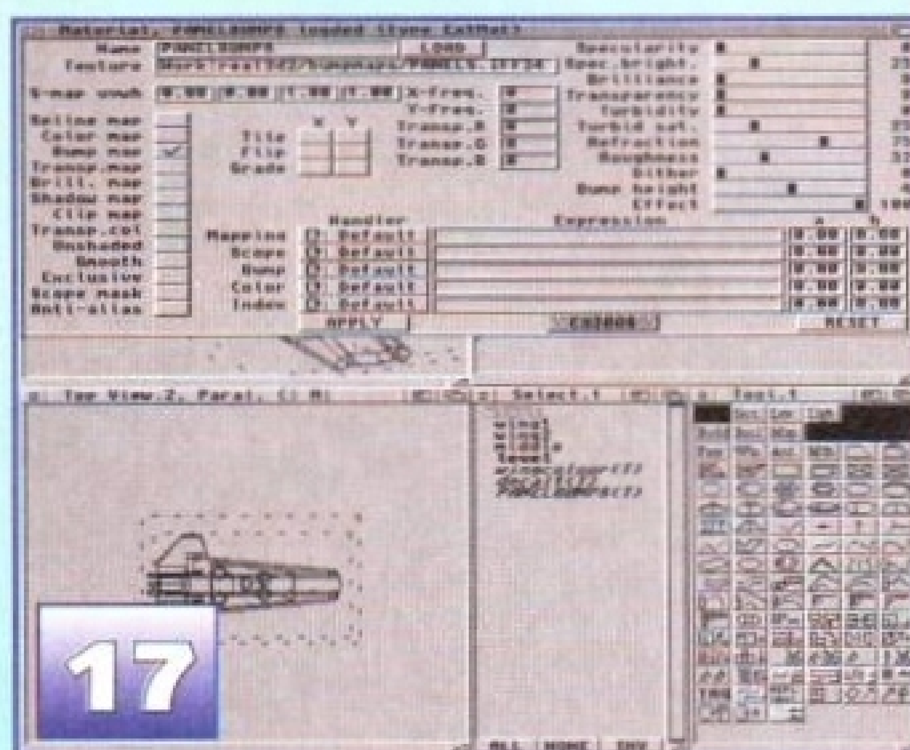
Pick up the image (against a black background) as a brush and save it. Go back to *Real 3D* and press <right-Amiga><m> and load in your texture. Check the Colour Map button is on, enter a name and click on apply. Close the window.



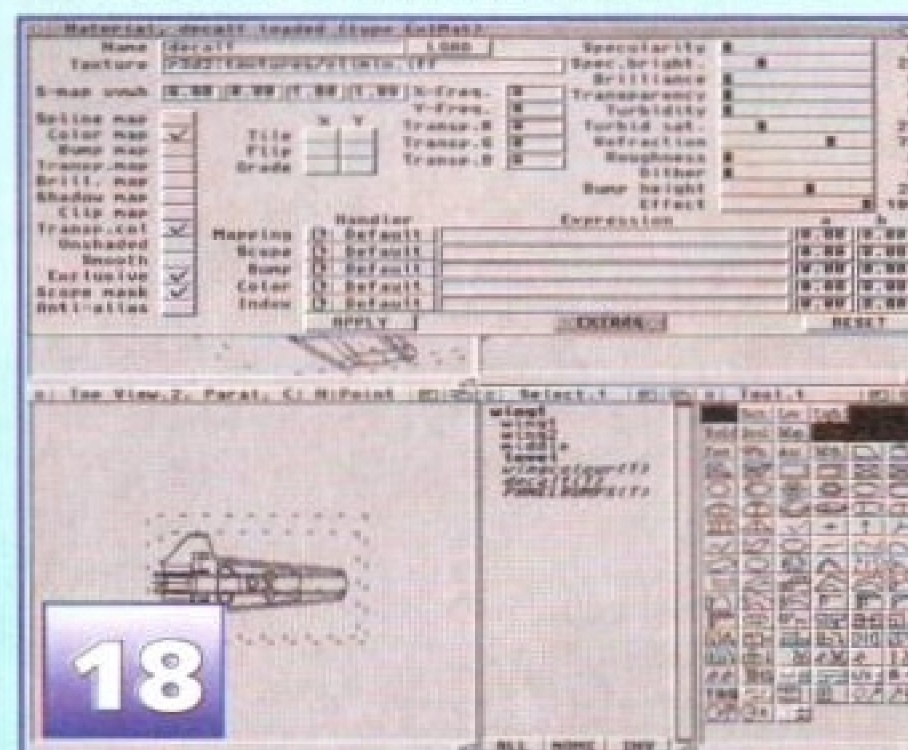
Make sure you're under the wing level. Select the menu Create/Mapping/Parallel then select the new material you created. Go to the top-view and draw a rectangle around the craft with a little to spare. Position the new mapping above the wings.



For a little extra detail, let's add some panels or hullplates to our craft. To do this we need to create some bump maps – just draw the panels in a paint package or image processor using shades of red rather than a greyscale.



Before you quit, draw some decorations on a black background and save them as separate brushes. Go back to *Real 3D* and bring up the Material editor, create a material with your bump map, changing the type from colour to bump.



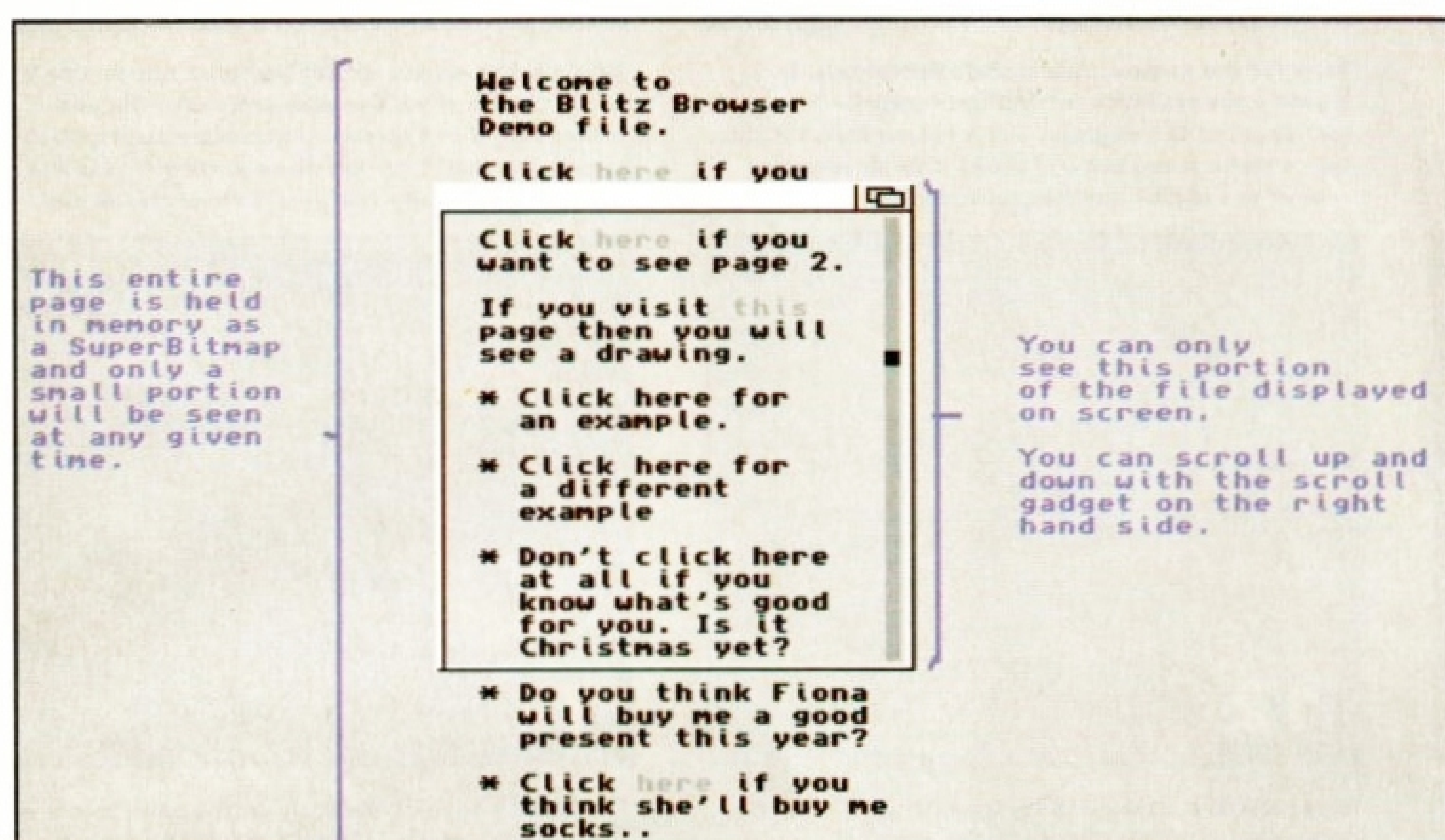
Create a new mapping and return to the Material editor. Create materials for each decoration image checking the following mapping types; Colour, Trans Col, Scope Mask and Exclusive. Apply these new mappings as you see fit.



Blitz Tutorial

Several things have been bugging John Kennedy this month. Join him as he tidies up his Blitz browser.





Here's how our browser works: the entire document is stored in memory, but only a Window can be seen. Moving the Window up and down allows us to scroll up and down through the document.

The last month has been spent tidying the Blitz browser, fixing a few bugs and generally trying to polish the program. I've also resorted to at least one direct call to the Amiga's operating system library – a technique which can be very useful to know.

First things first, and the slight flicker in the vertical scrolling gadget has been driving me nuts. The problem is that updating the main display causes the screen to be erased and the gadget redrawn. The Amiga can refresh gadgets quickly, but there is still an annoying flicker.

If you remember, our screen display is actually a window on a larger SuperBitMap. Whenever the scroll gadget is used, the entire contents of the window are redrawn, and this leads to the flicker. I tried various ways of getting around this problem: using slightly different gadget flags didn't help. I also experimented with opening two windows: one for the text, one for the scrolling gadget. This didn't work very well either, as only one window can be active at once and this can lead to confusion.

For example, if you have just clicked on the scrolling gadget, you'll find the pull-down menus are no longer present until you click in the main window again. Bah...

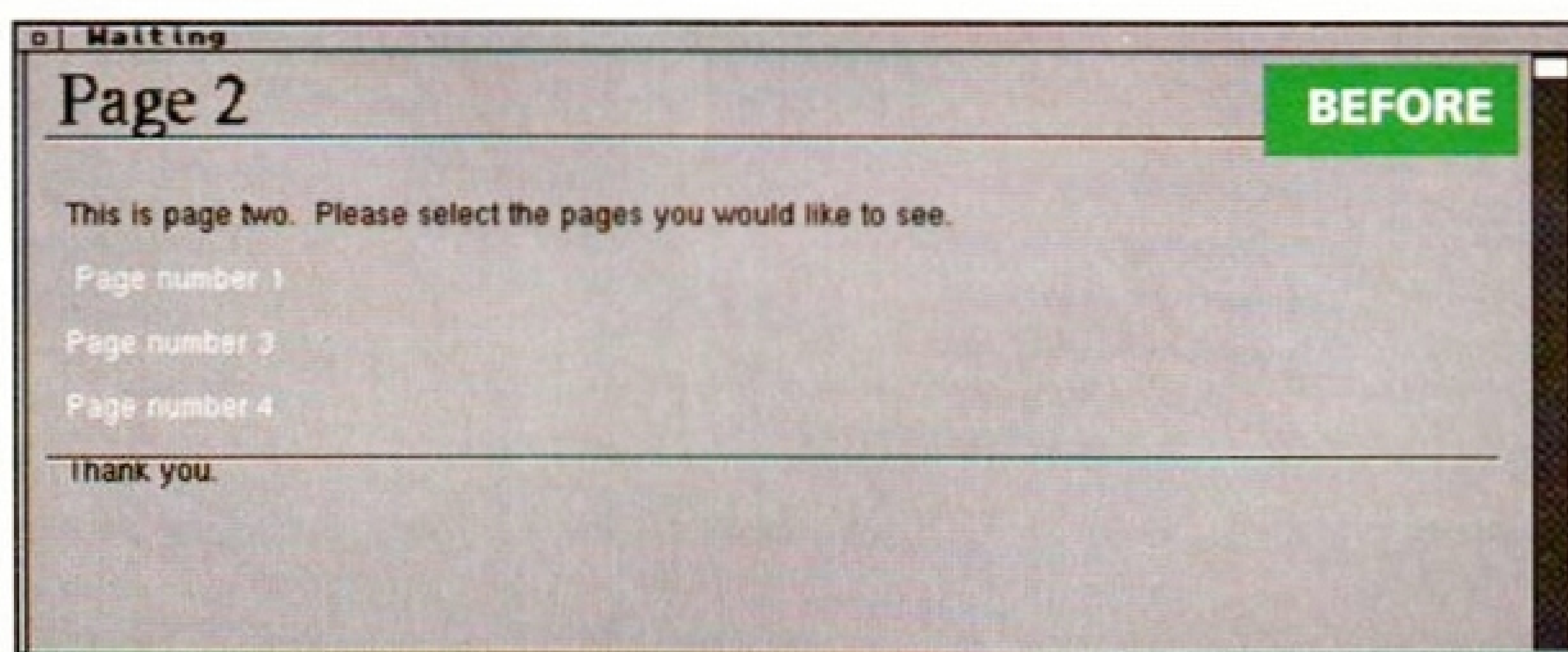
I tried using the VWait command to try and synchronise the screen update with the gadget refresh: it made no difference at all.

The solution was staring me in the face, and was actually very easy. The SuperBitMap I had defined was 640 pixels across: the same width as the normal display Window. The answer was to make this window less wide, say 600 pixels across. Now when the SuperBitMap window was redrawn, it wouldn't reach into the gadget strip down the right hand side.

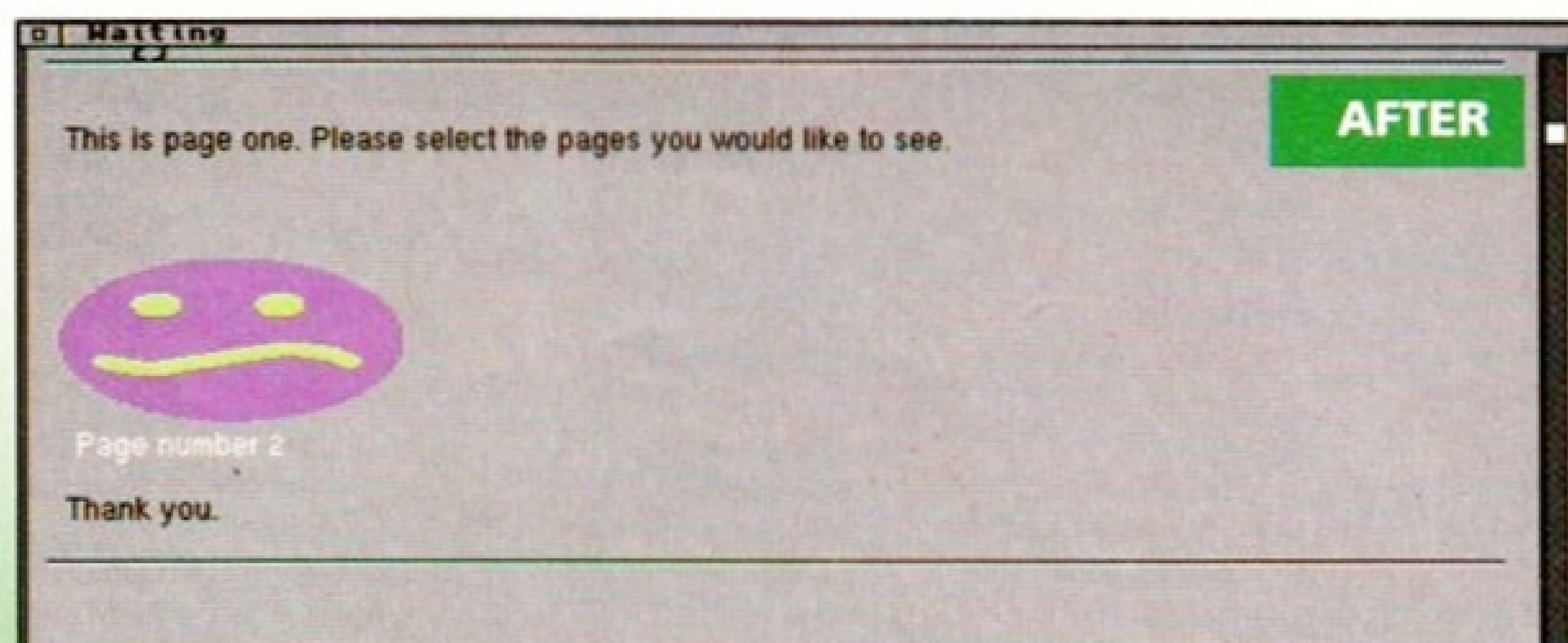
The result is a smoothly moving scroll bar. It's now also possible to add a little border around the scroll bar, which improves the whole appearance even more.

So, why did we have to resort to this kind of trickery when other programs can scroll their windows without problems? The reason is that we decided long ago in the design phase that we needed to render the HTML document in its entirety, before we could view it. We had no choice, given the nature of HTML.

By comparison, a program such as a text editor does not need to render the entire document prior to display. Instead it can scroll the screen by actually copying the contents up or down a few lines: and then adding the new text which is due to appear. It's a subtle but very, very important difference.



Notice how the scroll bar on the right hand side of the window now looks considerably smarter.



```
.open_display

; Define and open a Screen and Window

; Define a BitMap
BitMap 0,600,height+#screen_height,4
; The display is 4 deep, i.e. 16 colours!

; Define menus
MenuTitle 0,0,"Project"
MenuItem 0,0,0,0,"Load             ","L"
MenuItem 0,0,0,1,"Save  ","S"
MenuItem 0,0,0,2,"About"
MenuItem 0,0,0,3,"Quit","Q"
; Define Gadgets

PropGadget 0,-14,2,128+2+1024,1,10,240

; Open a Special Window
Window 0,0,0,640,256,$20000|$20|$8|$400|$80|$1000,"SuperWindow",1,2,0,0

GadgetBorder 619,3,7,238

SetMenu 0

SetVProp 0,1,0,(10/height)
Redraw 0,1

Gosub prepare_fonts

WindowFont 0

Return
```

Listing One: Decrease the size of the window and redrawing won't reach into the gadget strip – problem solved!

SMOOTH SCROLLING

That said, **Listing One** shows the Blitz Basic listing which I had to alter to make it all happen. The important differences are highlighted. Notice too how I had to add spaces after the Menu text. This helps to cure a "feature" of AmigaDOS menus which causes them to get confused, depending on the font used.

As the screen area for the scroll gadget isn't touched, it's possible to render the gadget border outline. However, it's also possible to add a few other items as well. For example, there is nothing to stop you adding buttons for quickly moving to the bottom and to the top of the file. Or buttons for stepping up and down through the document. All these gadgets are quite easy to add, and I'll leave it up to you to experiment.

WRAP IT UP

Another area of the program I wasn't keen on was the routine which calculated when the text should wrap, when it gets to the edge of the screen.

The program tried to guess how many pixels long a given string of text was going to be by calculating the number of letters and knowing the size of the font. This technique works, but it leads to complications when different fonts are used in the same string. It's also confused by italics and bold text, and heck, it was downright ropey.

I had originally planned to use a function I had called from my original browser written in C. The operating system routine "TextLength" could be given a string and it would return the size in pixels: exactly what I had been looking for. Sadly however, Blitz doesn't have a version of that command.

The good news is that Blitz does have a way of calling these operating system routines. You don't even need any special code: simply use the OS routine with an underscore after its name. There are a list of the routines in the Help file, in the back of the Blitz manual and in the official Rom Kernal manuals and *Developers'* CD-ROM. **Listing Two** shows the new and improved code segment which does it all.

This short routine could be used to tidy up the listing quite considerably, and again, that's something that I'll leave you to experiment with.

Listing Two: Again the important changes here have been highlighted. This new code should tidy things up.

IS IT A BIRD?

Blitz is a package which is still undergoing a lot of development. In fact a new package has just been released: the *Blitz Support Suite*. This is a collection of very useful add-ons for Blitz, programmed by Leading Edge/Red when Excited, and it includes such wondrous things as *SuperTed* – an improved text editor. You'll also find a new debugger, and a comprehensive new library which includes ARexx support, and a full datatype interface. More details next month, but in the meantime visit the web support site at: http://www.ldngedge.demon.co.uk/index.html



By the way, if you are still using Ted v2.1, you should know that v2.2 is freely available on the Internet. You can download it from the Aminet, and I'll also make sure that it (and this month's source code) is available at the Amiga Format FTP site. Sorry about the lack of my Web site this month: it's temporarily vanished.



```
.process_text
chunk$=chunk$+l$

    rp.l=RastPort(0)
    length.w=TextLength_(rp,&chunk$,Len(chunk$))
    If (((offset+length)>#limitx) OR ((offset+length)>(#limitx-60) AND l$=" "))
    If preview=Off Print chunk$
    If preview=On
      t$="Height:"+Str$(ypos)
     WTitle t$,t$
    End If

    Gosub line_break
    chunk$=""
EndIf

Return
```

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Amstrad PCW9512 M/Strike	2·60	2·45	2·25	2·05
Brother M1009/1024/1109/1209	3·90	3·75	3·55	3·35
Citizen 120D/LSP10/Swift 24/9	2·85	2·70	2·50	2·30
Commodore MPS1220/1230	4·50	4·35	4·15	3·95
Epson LQ100	4·10	3·95	3·75	3·55
Epson LQ200/400/500/800/850	3·45	3·30	3·10	2·90
Epson FX/MX/RX80/FX/LX800	2·90	2·75	2·55	2·35
Epson LX80/86/90	2·12	1·97	1·77	1·67
Mannesmann Tally 80/81	3·90	3·75	3·55	3·35
NEC Pinwriter P2200/P2+	3·03	2·88	2·68	2·48
Oki ML182/183/192/193/195	3·17	3·02	2·82	2·62
Panasonic KXP1123/1124/1140	3·46	3·31	3·11	2·91

BLACK	1 off	2+	5+	10+
Panasonic KXP1080/1180/90	2·89	2·74	2·54	2·34
Panasonic KXP2123/2124/2180	4·95	4·80	4·60	4·40
Seikosha SL90/92/95/96	5·70	5·55	5·35	5·15
Star LC10/20/100	2·29	2·14	1·94	1·84
Star LC200	3·00	2·85	2·65	2·45
Star LC24 – 10/20/200	2·86	2·71	2·51	2·31
Star LC240C, LC24-30	7·75	7·60	7·40	7·20
Taxan Kaga KP810/815/910/915	3·14	2·99	2·79	2·59
COLOUR	**1 off**	**2+**	**5+**	**10+**
Citizen 224, 240, Swift 24/9	11·95	11·80	11·60	11·20
Panasonic KXP2123/2124/2180	10·63	10·48	10·28	9·88
Star LC10/20/100	6·00	5·85	5·65	5·25
Star LC200	9·78	9·63	9·43	9·03
Star LC24 – 10/20/200	9·63	9·48	9·28	8·88
Star LC240C, LC24-30	9·20	9·05	8·85	8·45

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Canon BJC70 Blk (Pk 3) BCI-11BK	11.00	10.80	10.60
Canon BJC70 Col (Pk 3) BCI-11C	18.20	18.00	17.80
Canon BJ 200/230	16.30	16.10	15.90
Canon BJ 300	7.00	6.80	6.60
Canon BJC 600 Black (Pack of 2)	6.00	5.80	5.60
Canon BJC 600 Cyan (Pack of 2)	6.00	5.80	5.60
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Commodore MPS1270	10.80	10.60	10.40
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Epson Stylus Colour/Pro XL Colour	22.00	21.80	21.60
Epson Stylus 820/Colour II/IIs Black	18.50	18.30	18.10
Epson Stylus 820/Colour II/IIs Colour	26.60	26.40	26.20
Epson Stylus Colour 500 Black	18.90	18.70	18.50
Epson Stylus Colour 500 Colour	26.90	26.70	26.50
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	1 off	2+	5+
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HP D'jet 500 Series Tri-Col	12.00 for 12ml of each Col
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	1000	7.49

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Oki OL400/800	21.00 each
Panasonic KXP-4410/4430	26.00 each
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Ricoh LP6000/1060	10.50 each
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Ring for Toners not listed

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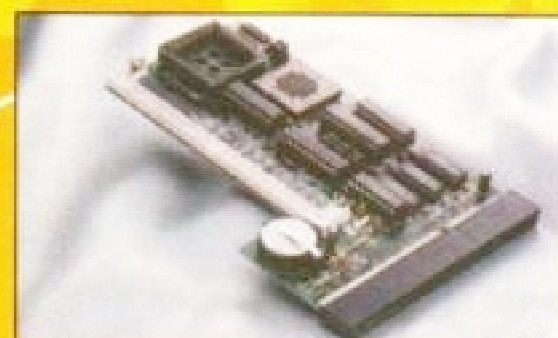
E & O E

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- External AMIGA/RGB/CVBS (Video)/SVHS (Y/C)/PC to VGA double scan converter.
- For all AMIGA users and PC users using VGA monitor display AMIGA, PC, VCR, TV programmes and TV games.
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enquiries welcome

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Fax: +886-2-7902730
E-Mail: biocon@ms1.hinet.net



MailBag

Send your letters to: Letters To The Editor, *Amiga Format*
30 Monmouth Street • Bath • Avon • BA1 2BW.

THE MORE THE MERRIER

Firstly, I'd like to tell you that I agree with Grant Sutcliffe's views in your September issue but there are a few things I would like to add.

To make the Amiga popular again, Viscorp need to develop two new computers instead of just one. Why? you ask. Well look back at the Amigas once successful past.

When Commodore brought out the A1200 they also brought out the A600 to compete with the games console. It would be a good idea to do the same thing again. The second new computer would be like a CD^{32} with a keyboard, a faster processor – 030 as standard – and more new stuff.

The machine could retail at around £300 and should do well over Christmas. The first newly designed computer would sell for around £550, hopefully at the same time. The two computers do not only compete with the console and the PC market, but give people who can't afford a big box computer the next best thing.

Not many kids have more than £500 spent on them at Christmas – the A500 /A600/A1200's were aimed at all ages.

Alex Booth
Castleford



The development of a more powerful replacement to the A1200 would mean a strong competitor in the PC market...



...while a cheaper A600 type machine for kids would give the console market some stick.

Certainly a cheap, powerful machine aimed at the home market couldn't really fail. It only requires someone to make the investment and make sure that people are aware of the machine, and can buy it somewhere.

GOOD GOTT!

Today the new edition (issue 89) of your magazine arrived and though I haven't read all of the articles yet, it looks like a pretty good package. Much like the last one I must add, which I also enjoyed reading.

When I read through the letters, I get the impression a lot of people enjoy the magazine. Then why, I ask myself, has the circulation dropped since 1992? Could it be that only a few months later Commodore's problems started? Problems which haven't really been solved up to the present day!

It's just the same today. Who can blame people going to the shops wanting to buy their first computer and coming home with a PC. The Amiga sadly isn't really an option with such an unsecured future.

Let's just hope Viscorp have learnt a lesson from the mistakes other companies (Commodore, Escom) have made in the past and that they can get the Amiga back into a position worthy of its features. I'm sure you at *AF* will be covering Viscorp's progress.

The Gallery







BALANCE

by Richard Allen

Richard has used a combination of *Cinema 4D, Photogenics* and *Vista Pro* to put together this evocative image, whose message is that the Earth is worth more than money.



Bumper Christmas Giveaway

Arcane is the magazine devoted to role-playing. They've kindly given us £250 worth of gaming stuff so if you fancy a go then send a postcard with your name, address and telephone number to:

Amiga Format • Arcane Christmas Compo
29 Monmouth Street • Bath
Somerset • BA1 2DL

arcane

In the meantime, those of us who have been faithful to the Amiga should continue to do so. And there still is quite a useful market for both Amiga hard and software if you look around.

Something else I noticed is your venture into the German language on the last page of the October issue of the magazine. Now I don't want to sound like a 'know-it-all' here, but in German there simply isn't a word like 'got'. If you are referring to god, that would be spelled 'Gott'. Well, I guess I'll just have to wait for the next issue and hope for clarification.

All in all, I can only say keep up the good work. There are still a lot of people supporting the Amiga and many of them read *Amiga Format.*

Congratulations also to Dale Bradford as he (nearly) always gets it right in his column.

Steven Peskett, Germany

Well, AF *will be here for as long as people want to read it. Yes, there are fewer Amiga users now than there were, and I suppose that's quite odd in a way – it isn't as if Commodore's and Escom's problems made everyone's Amigas stop working or anything. You can still do just about anything you ever wanted to on an A1200…*

We hope you've enjoyed the last few issues. If you haven't then let us know why not.

As for our German lapse… well, languages were never my strong point. At least we don't have to do a German language version every month – Gott sei Danke!

WHAT EVER HAPPENED TO…

What does the news of a 64-bit RISC-based Amiga that is Windows NT and DOS-compatible, and able to outperform a Pentium by five times sound like? Good?

Couple this with a new chipset that performs ten times better than AGA; a chipset with 3D image rendering built into the hardware; and there's more – chip RAM to 18Mb, compressed video data formats, 16 and 24-bit colour modes eight voice stereo sound and 16-bit PCM 100KHz sampling rate. All this and only, I quote, '12 months, or maybe less, away'. Does this sound like a dream come true? Well it did when I read it in *AF53* (Dec 93).

Viscorp was stated as saying that a new Amiga is at least a year away in your October 96 issue – why? The technology is clearly there to make a new machine that will be the envy of the world. It has been there for over two years, yet nothing is being done to release a next generation Amiga. Surely all the R&D for this super Amiga has not been lost; I know the various companies that have owned the Amiga can be accused of foolhardiness, but surely not that much gross negligence.

Perhaps, though, Viscorp is right in not releasing such a machine; it would certainly stop a lot of executives at PC companies from jumping off the top of their nice, shiny office buildings.

Continued overleaf ➡

Development of a 64-bit RISC based Amiga is more likely to come from Phase 5, rather than Viscorp.

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GOLDEN FLIGHT

by Richard Baker

This is one of three rendered pictures that Richard sent us this month and it is particularly nice because of its subtle use of light.



LYCAMTHROPY

by Andy Watkinson

Andy was inspired by the film "Wolf" and used *Photogenics* to put together this collage using images from the Weird Science *Multimedia Toolkit*.



INHUMAN

by Matthew Laurenson

Matthew put this gruesome picture together using *Personal Paint*. He's looking for graphics work, so if you're interested you'll find contact details on the CD.

Bumper Christmas Giveaway

***Total Film* – the new movie mag – has raided its store cupboard and dug out seven Carry On books for us to give away. The books continue the hilarious antics of the famous films and if you'd like to win one then send a postcard to:**

Amiga Format • MOV Christmas Compo
29 Monmouth St • Bath
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The pre-preview shots of *Foundation Editor* certainly look very promising.

Anyway, the price of a RISC based Amiga would certainly be out of the reach of many of the people who originally bought their Amiga as a budget machine.

It would however seem sensible to release a new machine to keep the market alive – I think an '040 with CD-ROM, 4Mb, hard drive and a modem would go down well with the buying public and still be able to beat a PC in the price stakes – if done properly. Or am I the one being foolish?

M. Daniel
Peterborough

Thanks for your comments. As you should be aware, if you are a regular reader, the first RISC based Amiga will almost certainly come from Phase 5 (see news, AF90*).*

Of course, when AF *said that there would be a RISC based machine in under 12 months, we were (and I had only just joined* AF *then, cor, doesn't time fly) merely relaying information which Commodore had told us.*

Obviously, in the meantime, a lot of things have happened. The main difficulty would be porting the operating system, and I believe that Amiga Technologies have made some inroads into this, but as Viscorp don't have any immediate plans for a RISC machine, I expect this isn't their highest priority.

THE GAME REMAINS THE SAME...

I read an interview in *Future Music* magazine with music maestro Black Dog (Issue 46), who has released a few music tracks in the charts and amongst the plethora of keyboards he has, he uses an A1200 Amiga running *Dr. T's KCS v2.3* for midi sequencing!!! So there is still hope for Amiga musicians with a MIDI set-up and a lot of patience!

I would also like to say that seeing the screen shot of the *Foundation Editor* program (*AF89* Coverdisk), made me a happy man because it looks exactly (pixel for pixel) like *Settlers 2* and means that this game could be converted from the PC for the Amiga market. I played *Settlers 2* in the Game store and I loved it!!!

It is far superior to the first game, which still gives me (and my friends) hours of pleasure and the sequel instructs you on what to do, which means you don't have to read a chunky manual, like with the original game.

I think we should write to Blue Byte software individually, to pressure them into releasing the game. Maybe *Amiga Format* could send a copy of the screen shot in *AF89* to Blue Byte because I would definitely buy an A1200 if *Settlers 2* was released!

Christopher Neil
Deeside

Of course it would be possible to do an Amiga version. The only thing stopping games companies from doing so is that they don't reckon they could sell any...

Letter of the Month



DISK DIAGNOSIS

Some months ago, you were giving advice on unarchiving Coverdisks and the problems arising from this. While I agree with all the points you raised, the problem may persist.

Should this be the case, there is another ploy which relies on the fact that the LZX system is much more robust than any possible flakey scripts. Flakeys are the worst possible errors to diagnose.

1. Insert Coverdisk (write protected).
2. Open the disk.
3. Select Show All.
4. Open C.
5. Move UnLZX to RAM:
6. Move required archive to RAM:
7. Remove Coverdisk.
8. Insert a newly formatted FFS disk in 'drivename'
(Or a DiskSpare disk which uses FFS format sectors).
9. Open RAM:
10. Select Show All.
11. Make it read "UnLZX x 'archivename' 'Drivename'.
13, When disk activity stops, rename the disk as required and remove from drive.

This method doesn't normally copy Disk.info files, but does give clean copies, a thing that your scripts seem unable to accomplish in any consistent form.

Perhaps there is some obscure bug in the scripts. I read them and didn't find anything, but that doesn't means there isn't an error.

It may be that working directly from RAM: using Execute is what your scripts aspire to, but they seem to be falling down on the job for some configuration. Mine is an A500+ with 2Mb chip, fast, A570, MPS1550C & Viewtek mono monitor. Perhaps you may find others that cause problems. Could I suggest that these instructions be aired in the letter pages, and perhaps incorporated in the Coverdisks Extra page as a last resort?

John W Borland
London

Many thanks for your suggestions. I will pass them on to Dave Taylor, who compiles the disks for us. As I'm sure you can imagine, making a script which works on all Amigas all of the time is a bit of a headache for the poor chap, and he can do with all the help he can get.





AMIGA FORMAT COVER CD

Not content with giving you two fantastic Coverdisks, *AFCD8* is packed full of games, demos and useful utilities.

IN_THE_MAG

Code for Blitz and ARexx and the best of the current Atari ST emulators. Also in the emulators drawer, the latest version of ShapeShifter.

COVERDISKS

The contents of the Coverdisks are not replicated here (with the exception of one utility on AF92a) because the versions we have for the CD are bigger and better in all respects. You will find them in:
AFCD8:Look_here_1st!.



PD_SELECT

Just five demos in this month's selection mean that it won't take you long to get through them, but they have all won prizes at the various demo parties around the world.

LOOK_HERE_1ST!

We've improved the boot process on CD32's this month and added our font prefs to the Start Me script. Have a look at the Submission_advice if you're interested in sending us some of your work, and take a moment to reply to our AFCD Survey.

HANDY_TOOLS

This drawer contains just some of the tools that make creating the CD just that bit easier. Things that come in handy include:

MultiCX

AFCD8:Look_here_1st!/Handy_Tools/MultiCX/
The king of commodities, MultiCX is made easier to use if you install the accompanying MultiCXPrefs. MultiCX offers us a veritable smorgasbord of handy new features for Workbench.

PowerSnap

AFCD8:Look_here_1st!/Handy_Tools/PowerSnap/
This commodity is actually pretty old, but it has never been superceded. It allows you to copy text from places you wouldn't normally be able to, like DOpus's text viewer.

SnoopDOS and ARTM

AFCD8:Look_ here_1st!/ Handy_Tools/ SnoopDos/
AFCD8:Look_ here_1st!/ Handy_Tools/ ARTM/
These two tools help us when anything goes wrong (and it always does!). SnoopDOS shows you exactly what your machine is doing when it tries to load something and ARTM is great if a program on your machine crashes.



SwazInfo

AFCD8:Look_here_1st!/Handy_Tools/SwazInfo/
SwazInfo is a replacement for Workbench's Information requester. It fully supports drag and drop and we use it to add icons to files, change their tooltypes and find out how big directories are. We wouldn't be without it.

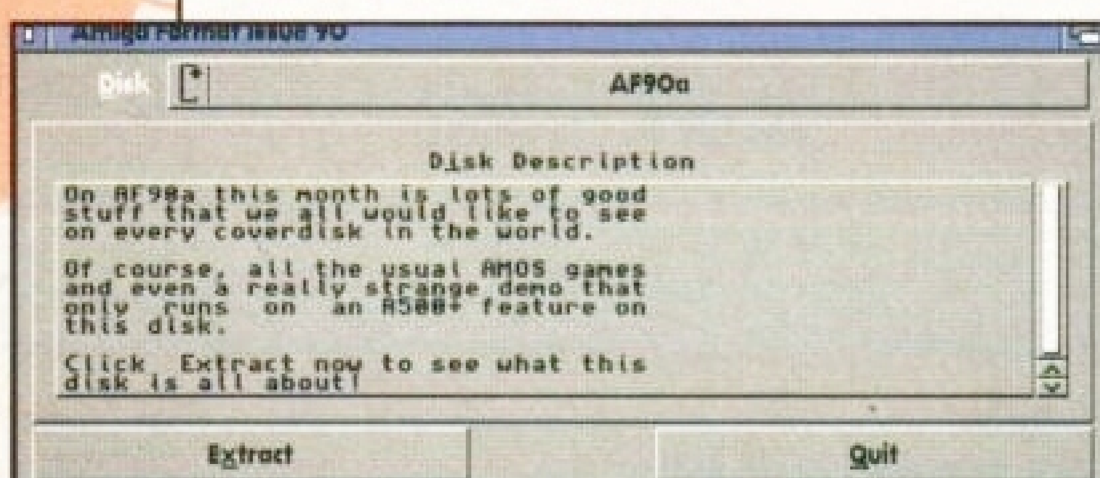
SF_ON_THE_WEB

We have the Amiga's three best-known browsers here. You can show the HTML pages in any of them but IBrowse displays it best. Both Voyager and IBrowse use MUI, but if you don't want to install it, you can view the pages in the new AWeb demo version.

ANIMATION

We've given Nick a break from having to create mammoth Lightwave renders this month by including some cracking fractal visuals courtesy of Mand2000. But be warned, they are mostly very big so they make quite some time to start playing.

READERSTUFF



Extract disks with ease thanks to this excellent contribution from Andrew King.

Over 30Mb of reader contributions this month means that there is plenty to keep you busy until AFCD9. Highlights include:

Alien Fish Finger

AFCD8:Reader_Stuff/David_Cruickshank/AlienFF
David wins the reader prize for the best game this month. *Alien Fish Finger* is a platform-based shoot-em-up. Well done David!

AFExtractor

AFCD8:Reader_Stuff/Andrew_King/AFExtractor
Andrew King wins the reader prize for the best serious utility on this month's disc for his *AFExtractor* program is intended to help people extract the *AF* Coverdisks from the CD.

Worms levels

AFCD8:Reader_Stuff/Chris_Korhonen/
AFCD8:Reader_Stuff/Kev_Watkins/
AFCD8:Reader_Stuff/Cavina_Marco/
AFCD8:ReaderStuff/Dockaych/
AFCD8:ReaderStuff/James_Caygill/AF_WORMS_LEVELS #2/
AFCD8:ReaderStuff/Martyn_Bampton/TWCustom/
A wealth of new material for Worms this month. as you get your copies!

SERIOUSLY_AMIGA

COMMERCIAL

In this drawer you will find the last patches to update PageStream all the way up to 3.2. You'll also find the websites for the companies on this month's CD web pages and some beta software from Amiga Technologies.

SHAREWARE

We have a great bundle of software for you in our shareware drawer this month. Highlights include:

AmFTP

AFCD8:seriously_amiga/shareware/comms/Internet/Misc/AmFTP/

The Amiga's best FTP client gets updated to v1.65. New features include asynchronous connections and an improved user interface when downloading.

The Complete Term 4.7

AFCD8:seriously_amiga/shareware/comms/Non_internet/The_complete_Term_4.7

Term, the comms package, supports every protocol under the sun and works well on any WB2 or above system.

ZJTools

AFCD8:seriously_amiga/shareware/Hardware/ZJTools

If you have a Zip or Jaz drive then ZJTools will come in very handy. It's a MUI application that allows you to password protect, format and mount your cartridges.

The Island of Dr. Moreau

AFCD8:seriously_amiga/shareware/Misc/etext/Island_of_Dr._Moreau

To celebrate the 100th anniversary of the publication of HG Wells' seminal science fiction novel we've included the e-text version for you to read over Christmas.

Amiga E

AFCD8:seriously_amiga/shareware/Programming/AmigaE

Everything you need to get started in E.

Director

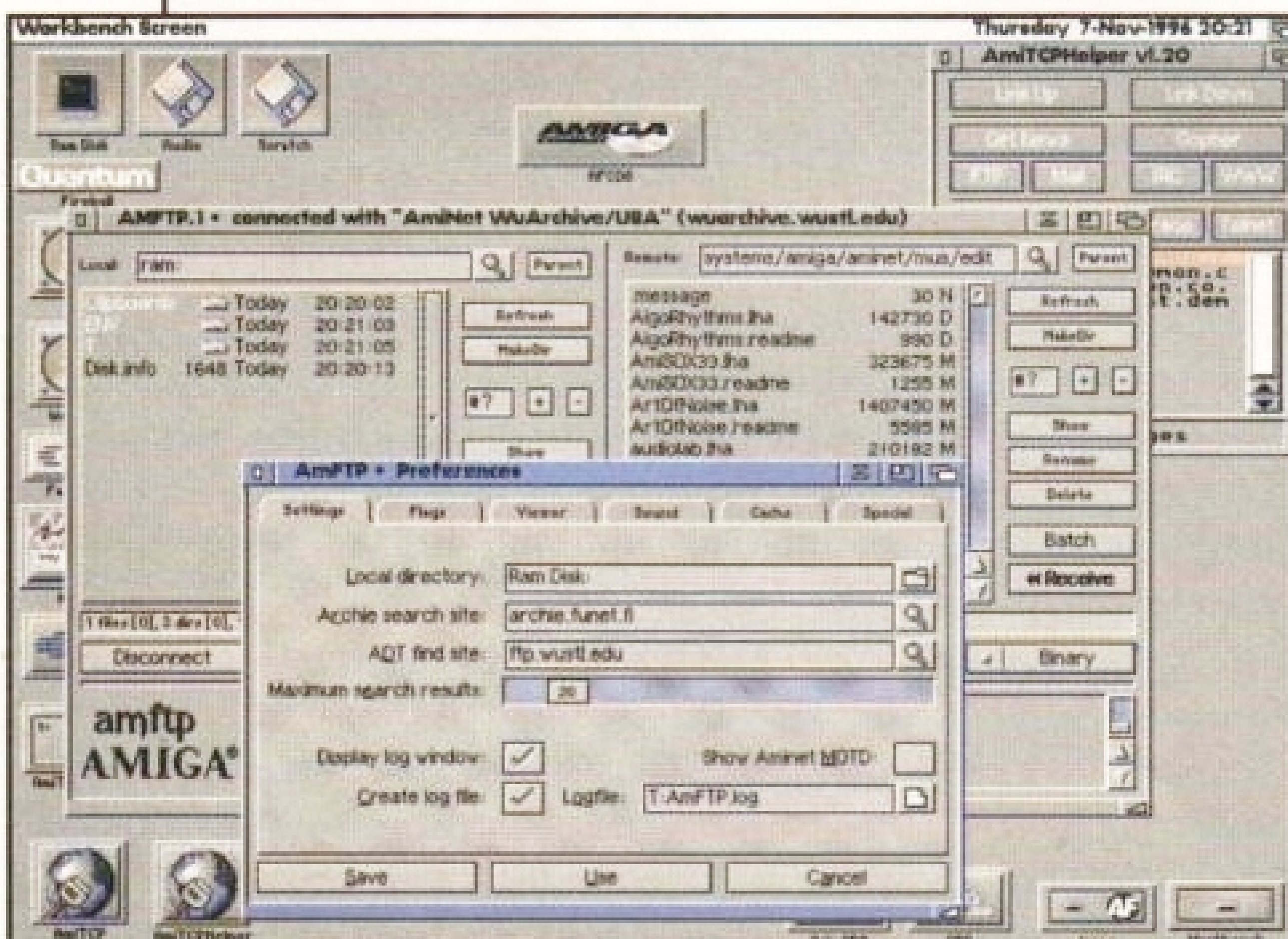
AFCD8:seriously_amiga/shareware/Workbench/Director

Something spooky for you this month. Director is an event recorder. It records mouse movements, keypresses and so on. You can then play these events back later making Director ideal for tutorials or presentations. It can even be used to freak out your friends as they watch your mouse move around the screen and words appearing in Shell windows without you touching the mouse or keyboard.

Final Writer patch

AFCD8:seriously_amiga/shareware/Program_Patches/fw5030r5

If have *Final Writer 5* and an accelerator then this patch could speed up your copy by as much as 400% for things like font rendering and internal arithmetic.



Download your favourite pages with ease – using the updated version of the Amigas favourite FTP client.

SCREENPLAY

COMMERCIAL

Not a bad month for commercial game demos. We have *Blobz, Kang Fu* and a new game called *Wendetta 2175*.

SHAREWARE

We have quite a number of great games in this month's selection of shareware titles including:

Maniacball

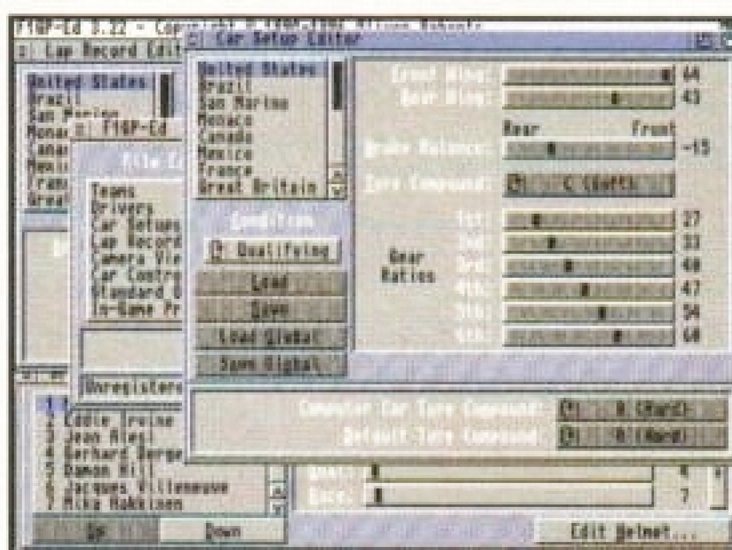
AFCD8:ScreenPlay/Shareware/ManiacBall/

One of the best Shareware games on this month's CD has to be *ManiacBall*. It's OS-friendly, works in low or Hi-Res and even on graphics cards. Plenty of multiball action makes for a great take on the Breakout theme.

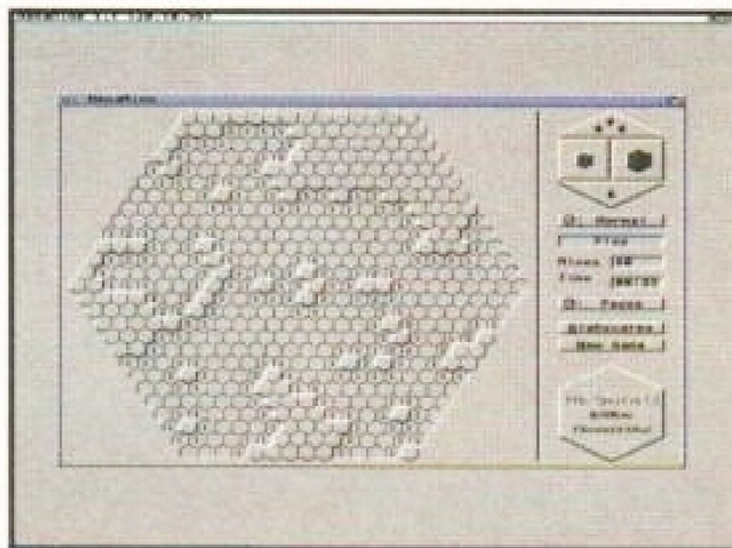
Slipstream

AFCD8:ScreenPlay/Shareware/slipstream/

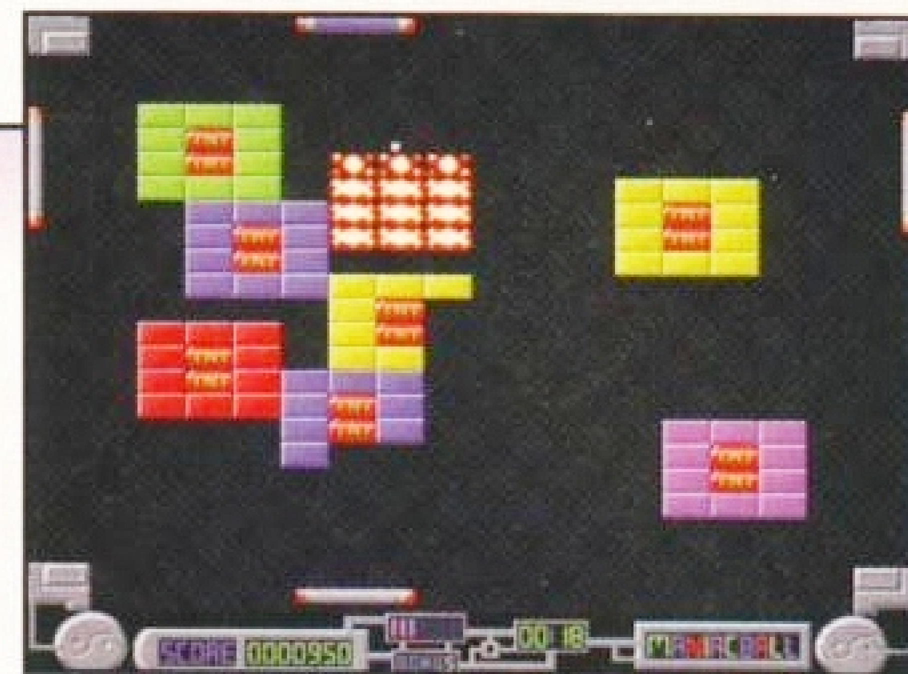
The Amiga's first *WipeOut* clone hits our CD running. It's early days yet, but already SlipStream looks the part with smooth track scrolling and collision detection. There are versions for different speeds of machine so even if you only have an 020 you should be able to see it at a reasonable speed.



The rather excellent *F1GPEd* will help you get the best out of your racing.



Don't make a mistake or it could be the worse for you in Haxamine.



An OS friendly, from all sides at once Arkanoid clone for the nineties.

SuperBallz

AFCD8:ScreenPlay /Shareware/ SuperBallz/

Remember *Marble Madness*? If you do then you'll feel a glow of nostalgia as you struggle to control your ball-bearing around the isometric levels.

UTILITIES

We have hard drive installers for four games: *ZeeWolf, Exile, SuperFrog* and *Pinball Fantasies*, stuff for *AB3D II* includes a custom level, a patch to speed things up and a saved game editor. We also have a few things for players of CCGs and even some stuff to let you examine your PlayStation CDs in greater detail.

CINEMA4D AND WORMS-DIRECTOR'S_CUT

Check out pages 108-109 for Cinema 4D and 106-107 for our great exclusive demo of Worms.

DISCLAIMER

This *Amiga Format* CD-Rom has been thoroughly scanned and tested at all stages of production. We recommend that you always run a virus checker on ANY software before running it.

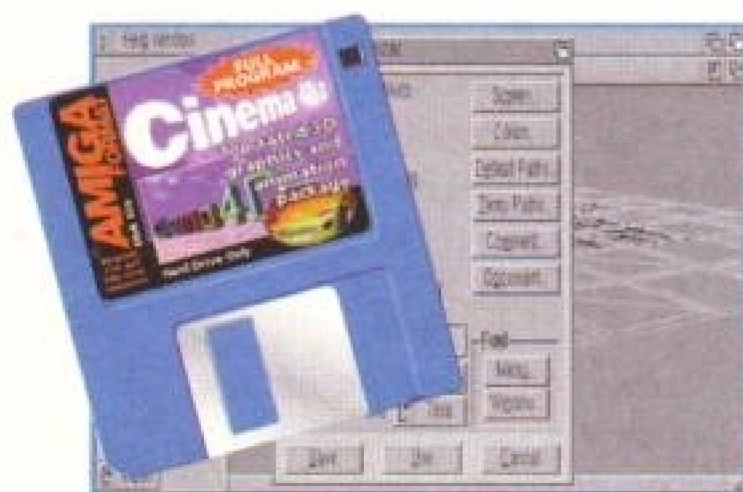
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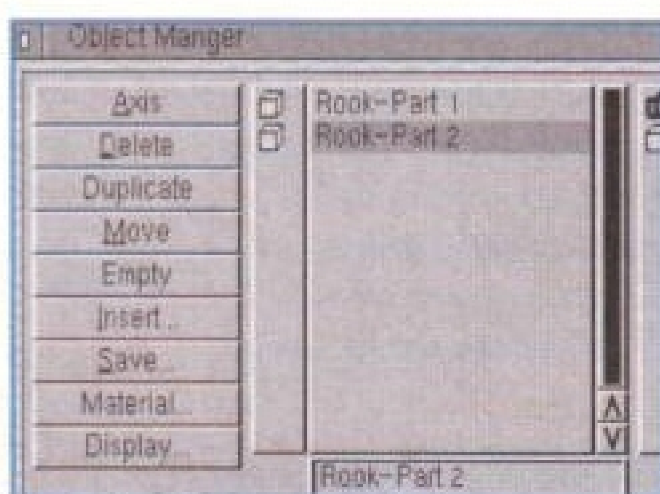
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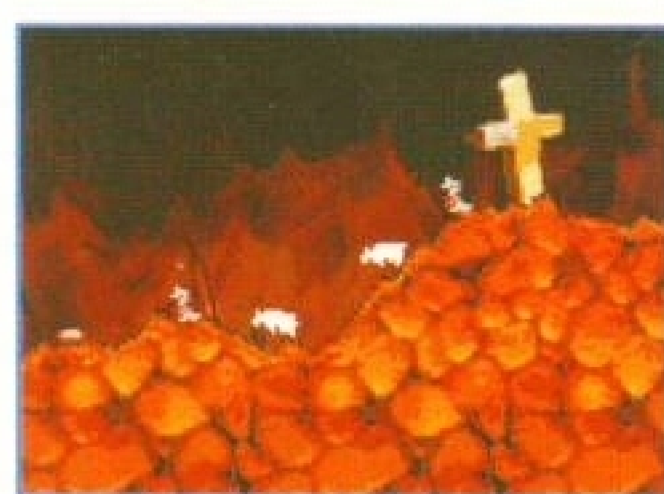
AMIGA FORMAT COVERDISKS



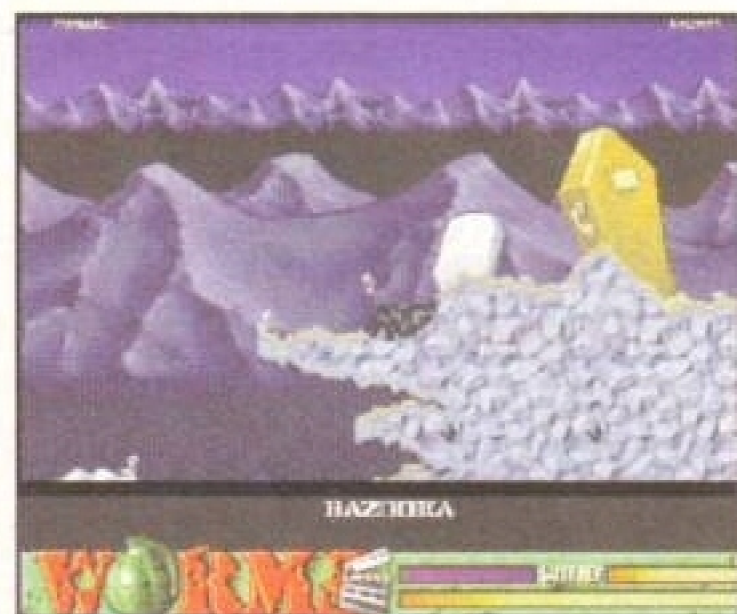
Get rendering with the full version of this *Format* Gold winning graphics and animation package.






You've read all about *Worms the Director's Cut* now test the game. Here's our exclusive playable demo...


A new, cavern, level and a new slant on an old weapon.


Here's the second of the demo's scenes - the graveyard.



WORMS THE DIRECTORS CUT

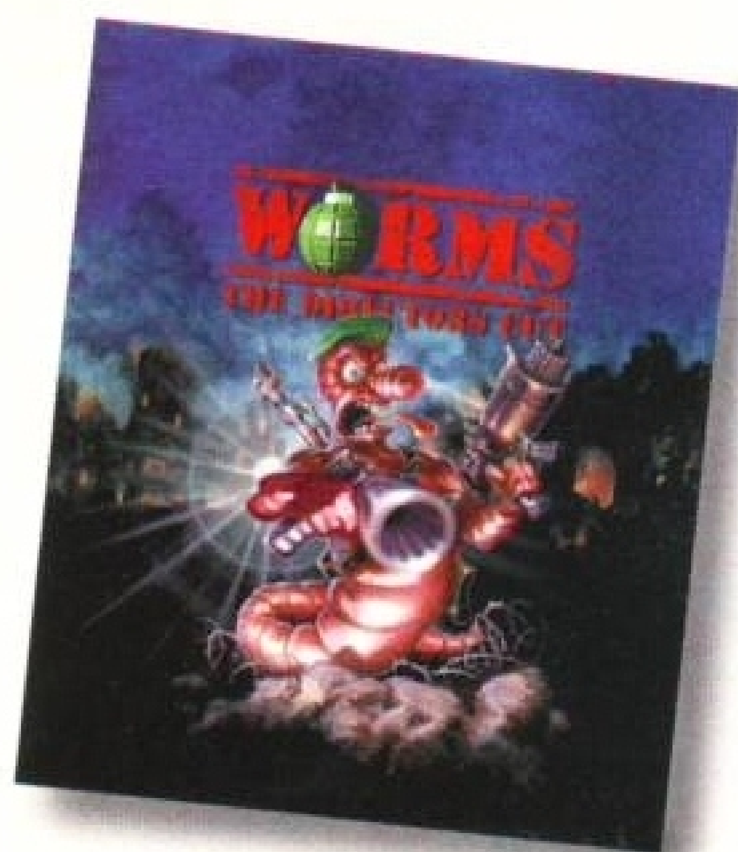
The first thing you're going to need to do is make sure you've got a couple of blank, floppies because the game needs to decompress itself before you can play it. Simply insert the Coverdisk and follow the on-screen instructions to decompress the demo.

Once you're ready to play you'll be presented with the game's main menu screen. The options that have brackets round them mean you can't access them in this demo (you can't name your worms for example) so click directly on Game Start.

From here you'll have the option to play either the League (a series of matches) or a Friendly (a one-off contest). Whichever one you select you'll be presented with a list of worm teams. The teams with a bar to the right of them are computer controlled, so even if you're playing solo you'll be able to enjoy the demo.

When you're ready to start playing, simply press the function keys to select your weapon, take note of the wind direction and go kick worm bottom! Last worm alive wins! It's as simple as that.

Obviously, because this is just a demo there are numerous features that can't be accessed – fine tuning the strength of weapons for example – but we're sure you and you're friends are going to have loads of fun and when we've whetted your appetite you'll be rushing out to buy the full game. 



Action packed fun this Xmas with an exclusive playable demo of *Worms the Director's Cut*. Plus a full version the rendering program *Cinema 4D 2*.

ORDNANCE SURVEY

Knowing your weapons and how destructive they are is the key to worm success so here's Amiga Format's guide to all things destructive (all panels should be read from left to right):



BAZOOKA
Your meat and veg weapon. Unlimited ammo and a fair old wallop.

HOMING MISSILE
A missile that homes in on your selected target. Don't get carried away though – you've only got a limited amount.

GRENADE
A hand-grenade. That you throw. It explodes after a few short seconds.

CLUSTER BOMB
Like a grenade except it divides up and causes more explosions.

GRENADE LAUNCHER
Fires grenades enabling you to propel your grenades further.

SHOTGUN
You get the chance to fire both barrels at a close target.

UZI
A sub-machine gun that fires many rounds very quickly. Very good for those mid-range targets.

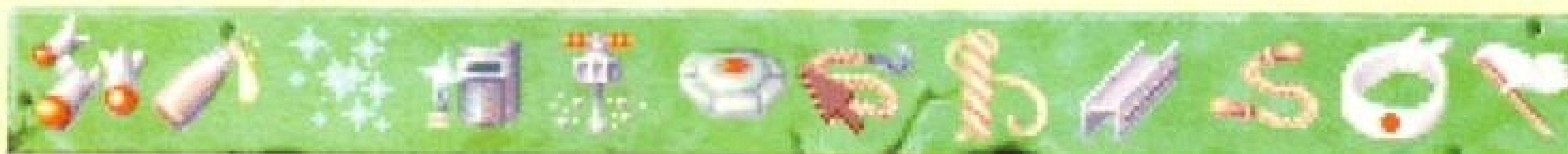
HANDGUN
For shooting worms who aren't far away from you.

FIRE PUNCH
Use this when you're standing next to an enemy worm.

DRAGONBALL
Fire it at close enemies

DYNAMITE
Drop it next to an enemy worm and then leg it.

SHEEP
Watch 'em go bouncing off before exploding.



AIR STRIKE
Use sparingly. It's great watching the bombs rain down on the enemies!

PETROL BOMB
Just throw it and watch the results!

TELEPORT
Enables you to get out of all sorts of tricky situations.

BLOWTORCH
Cut your way through the scenery.

PNEUMATIC DRILL
Drill your way down through the scenery.

MINE
Drop 'em and watch the enemy stumble into 'em!

NINJA ROPE
Use this to move around. Handy when you're out of teleports.

BUNGEE
Enables you to move to lower regions without using your whole turn.

GIRDERS
Bridges really. To let you get across gaps.

SKIP GO
Skips this worm's go. Surprisingly enough.

KAMIKAZE
Kills your worm but could kill several of the enemy if used correctly.

SURRENDER
For when you don't think you're going to win.



HOMING PIGEON
Like a homing missile, except it's a pigeon.

MAD COWS
Mad? They're livid. And they explode to great effect too.

BANANA BOMB
Not available in this demo.

HOLY HAND-GRENADE
Not available in this demo.

MINI-GUN
Not available in this demo.

BASEBALL BAT
Whack enemy worms and give 'em a headache.

SUPER SHEEP
The smart exploding sheep.

SHEEP ON A ROPE
Fires a rope to the ceiling and then swings to the enemy.

SHEEP STRIKE
Not available in this demo.

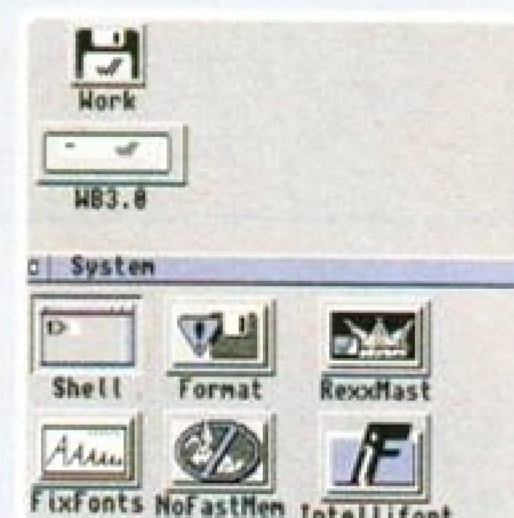
OLD WOMAN
Not available in this demo.

MING VASE
Not available in this demo

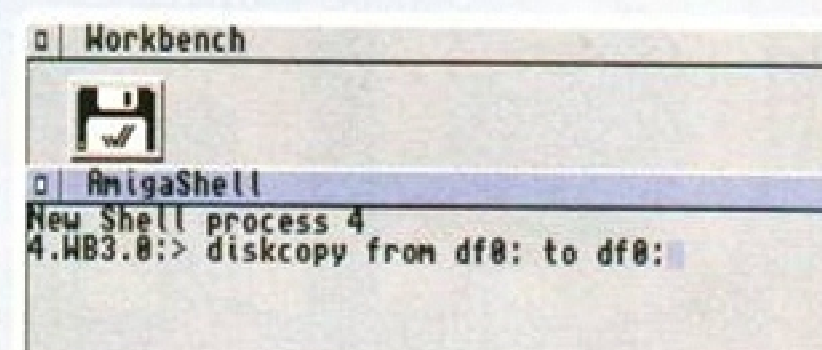
?
A secret concrete don... oops! This one's not available in this demo either.

BACKING UP YOUR COVERDISK

Copying your Coverdisk is really very simple. Just follow the stages below...

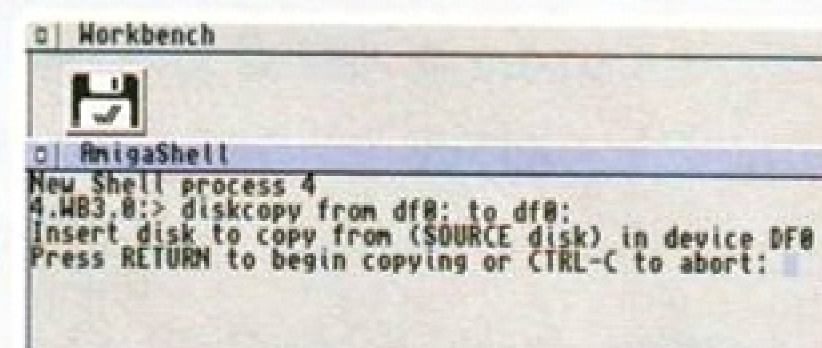


1 Boot up with your Workbench disk and find the Shell icon, in your system drawer. Double-click on this to go into the Shell.

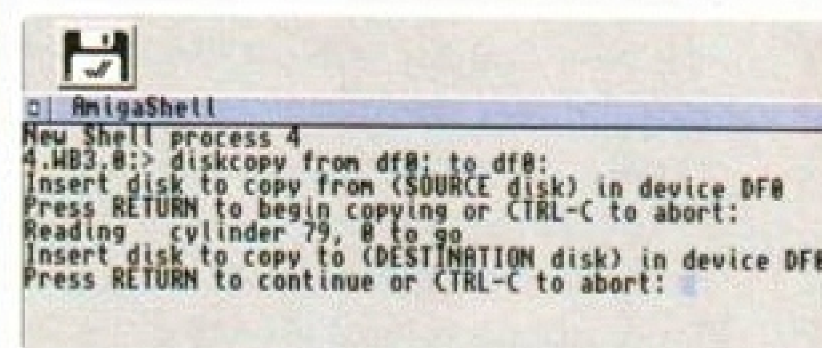


2 Type in the following line (with a *zero*, not the letter O), taking care to put the spaces in the correct places:

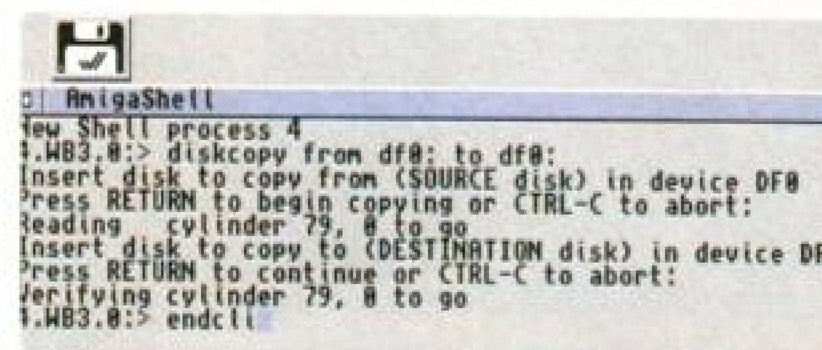
DISKCOPY FROM DF0: TO DF0:



3 When asked for the Source disk, insert your write-protected Coverdisk and press Return. All of the info on this disk will then be copied from the disk into memory.



4 Once your Amiga has read the info, it will ask for the Destination disk. Insert it and press Return. All information on this disk will be destroyed.



5 On an unexpanded machine, the Amiga may ask for the source disk again, because it copies in chunks. Finally, type *endcli* to close down the Shell.

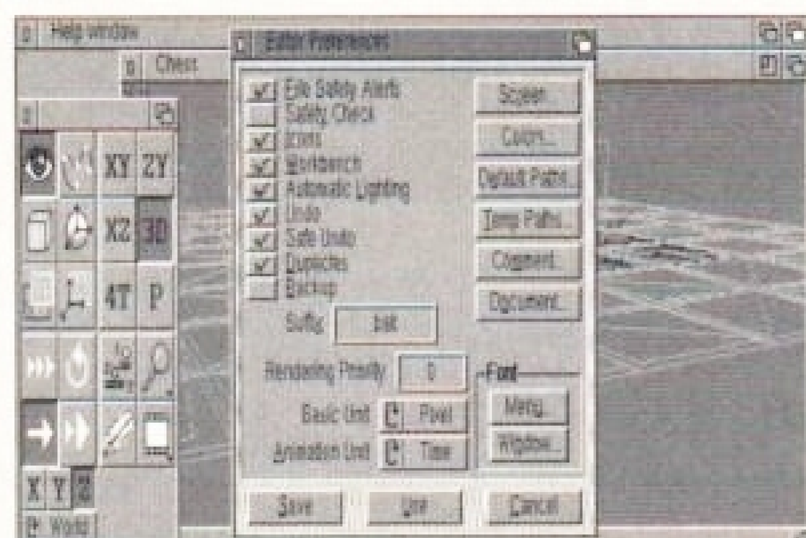
DISK NOT WORKING?

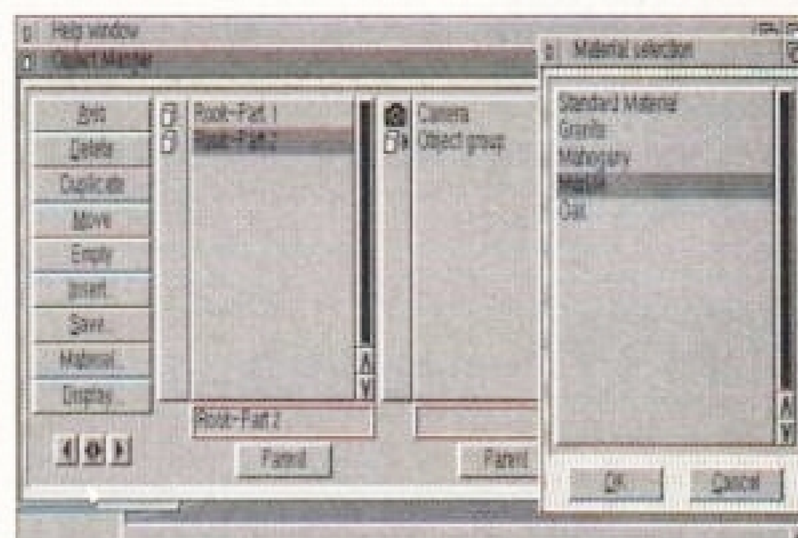
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Amiga Format (insert name of disk)
TIB PLC • TIB House
11 Edward Street
Bradford • BD4 7BH

If there is a manufacturing error the stamps will be returned with a replacement disk.




The Editor preferences allow you to control the actual interface and can be configured so that they suit your system.


Although it doesn't look very exciting, this Object Manager is absolutely essential to the operation of the program.

Cinema 4D 2

This month we're giving away the complete *Cinema 4D 2* program. David Taylor explains how to set the program up and provides a quick tour of the interface.

Despite its powerful features, *Cinema 4D 2* is one of the easiest 3D packages to use. The program has very reasonable system requirements: 3Mb RAM and a hard drive, but obviously, the faster processor you have and the more RAM the better. To get the program started you need to unpack the archive. This is set up automatically, all you need to do is boot the Coverdisk and enter the details of the destination hard drive for the program. The whole program, which is actually made up of three modules – the main program, the Scanline renderer and the Raytrace renderer, together with two example scenes, will be installed to your drive.

"It is worth stressing that the CD version is much better to have if you have access to a CD drive."

At this point it is worth stressing that the CD version of this issue is much better to have if you have access to a CD drive. The CD includes 020 processor versions of the three modules, some extra utilities and many more example scenes and textures. The floppy version only has room for the 68000 versions (which will work on faster processors, but aren't optimised to give the best possible performance) and the two scenes. Both versions include the libraries for graphics card users and they can be found in the Monitorlibs directory.


This is the second example render scene. It uses marble textures and transparency to give the desired effect.


Scenes are rendered over the top of a background picture. This is the cloud background from the Stairs scene, although the camera angle has been changed.

GETTING STARTED

Once the program has installed, just load the main *Cinema 4D* program. The two other modules are accessed by the main program, although you can use them separately, loading scenes through a requester and then rendering them from the module. This is useful if you don't have enough memory to work through the main program.

When the program loads you will see three separate windows. These make up the interface – the first is the toolbar, the second is the project representation and the third a quick help bar. By default the program will open up on Workbench, but you can change this to use a separate screen by adjusting the Editor preferences from the Settings item in the Project menu (Screen button). The Editor preferences also controls things like the default paths, fonts, unit types and whether Workbench is open or auto-lighting is enabled.

The two other menu parts that you need to experiment with are the Object Manager found in the Edit menu (Keyboard shortcut "V"), which allows you to change the parameters of the scene objects, including the textures for each object and the Camera. The Camera edit requester can be opened from the Extra/Camera menu (keyboard shortcut "C"). When the requester opens, you'll see there are six editable positions – these control the positioning of the camera and the exact direction it is pointing. There is also the focal length of the camera and a rotating item with "3D" and "P". These two switch between the position of the camera in the project window (3D) and the actual position of the camera for the final rendering. You can enter the points into the window manually or use the mouse to position the camera. Remember however that setting the camera position in the project window won't automatically set it for rendering – you must set it in both. If you use the mouse, you'll need to close the window to move about.

The other menus are explained in more detail in this month's tutorial on page 22. But if you want to experiment for yourself then try loading in one of the example scenes and playing about with it.

A LITTLE BIT EXTRA

There are a couple of extra things on this month's Coverdisk. When you install it you'll find the ARexx code to support this month's ARexx article on page 86. On the Coverdisk itself is a tiny utility called Random Colour Selection (RCS). Created by Micro Dimension Software (Rob Wilson and Neil Tweedy), it simply adjusts the palette to a random setting. Place it in your WBStartup drawer and your Workbench will have new colours every time you reboot.

CINEMA 4D INTERFACE

For installation instructions and a quick guide to the interface see page 108

1 This edits the exact position of the work area for the camera. As mentioned, you need to edit the position of the camera in both 3D and P mode – swap between these in the Camera requester – press "C".

2 This allows you to edit the points that make up the active object. You simply need to click on one of the object's points and then drag it to the new point.
Objects are made up from a 3D mesh and moving the points around changes its appearance. To select a new object you use the Object Selection menu from the Edit menu (Keyboard Shortcut "W").

3 These three buttons switch between different view modes, showing the scene from any of the two dimensions: XY, ZY and XZ.

4 This allows you to see the scene from a 3D perspective. It's like a quick view of how the final scene will look, but it does allow you to alter the camera's "real" position.

5 The Help menu bar will give you a quick idea of a button's function. Just move the pointer over the button you are interested in.

6 This is another view mode which encompasses all the others. It shows the scene from all three separate dimensions in windows and a fourth window gives you a 3D overview.

7 This allows you to zoom in and out. From here you can select from a sub-menu which allows you to use a magnifying glass (where you drag out a box of the area you want to magnify), zoom in or out, zoom to the active object, the whole scene or back to the original size.

8 This allows you to choose which of the dimensions you will move in, using the mouse. You can move three dimensionally if you want, enabling all of them and using the left button to move around in X and Y and the right to move in Z. Alternatively, select which dimensions you need to edit singularly.

9 This toggles the perspective view, which is the real position of the camera. This allows you move around the scene using the mouse to set the position for the final picture.

10 This is perhaps the most important tool allowing you to render the scene in a variety of different ways. You can select from the preview wireframe and shaded types, which are fast, but low detail (see Figure A), or the final versions, which use the Scanline and Raytracer (see Figure B). These can take some time, but generate the final image including textures. When the image is finished, save it to disk from the requester. To adjust the parameters of the renderer, you simple use the right mouse button to select the item from the menu, instead of the left. This will open the relevant render requester (see Figure C) where you can set the details and the size of the picture as well as the Render depth and antialiasing amount (which significantly improves the look of the final picture, but also ups the render time).

11 This is the project window where the selected view of the scene will be displayed. Renderings, either test or real, will be made on a separate screen, so having lots of colours on the editor interface isn't necessary.



Figure A: These versions render within seconds but are only useful for giving you an idea of the look. You'll need to use the very low detail ones for testing animations before rendering them properly.



Figure B: This quality Raytrace render makes the most of antialiasing (set to 3) and render depth and was rendered full screen, which is probably why it took 24 hours on an 030 machine.

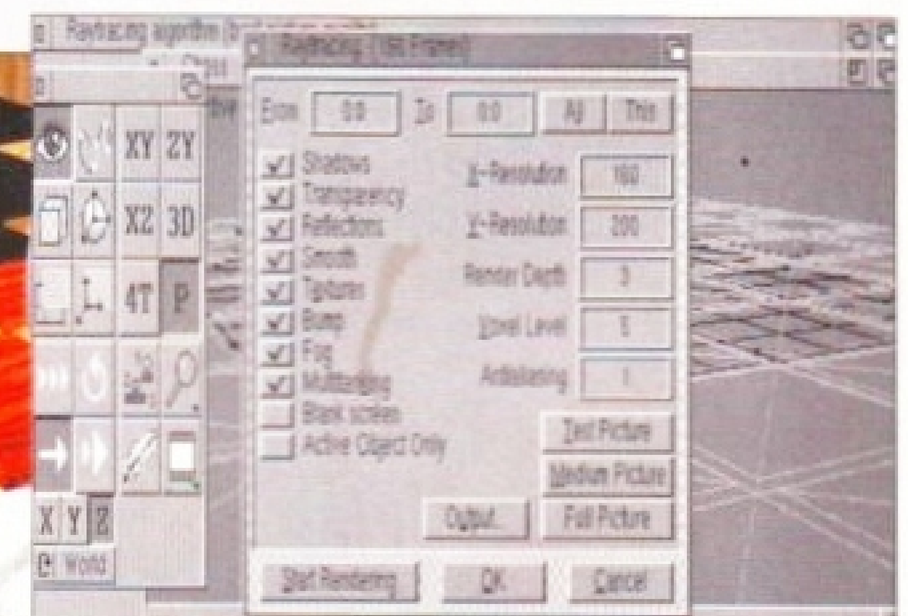


Figure C: The render requester allows you to choose different options and also lets you set an output path so that the file is automatically saved – ideal if you are creating an animation.

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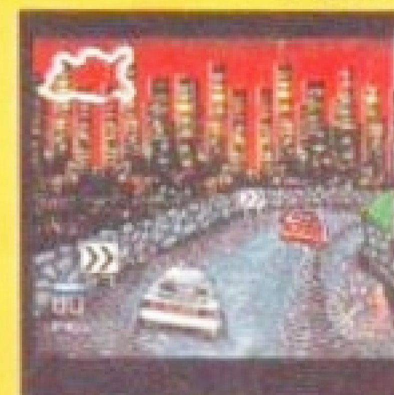
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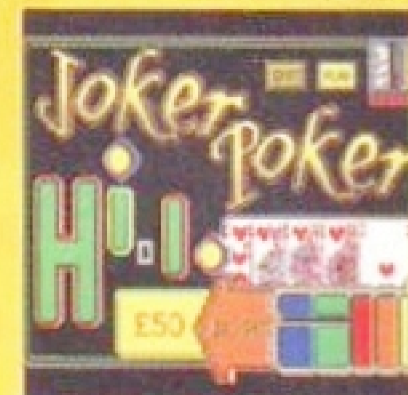
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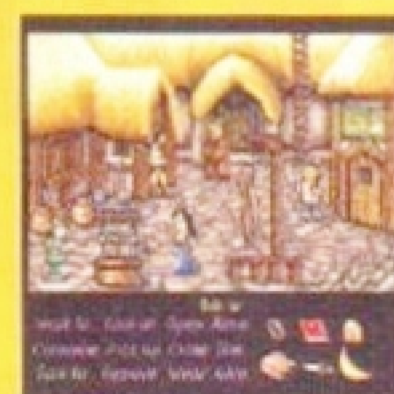
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Screenshots of games created with REALITY



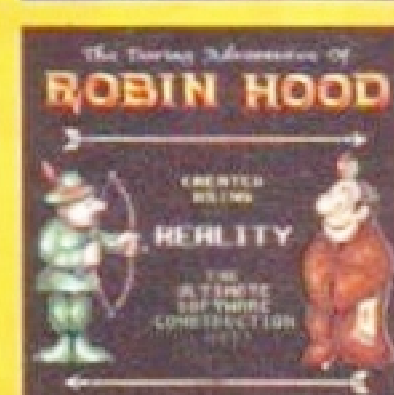


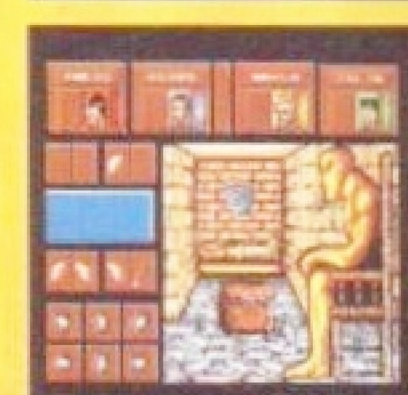




















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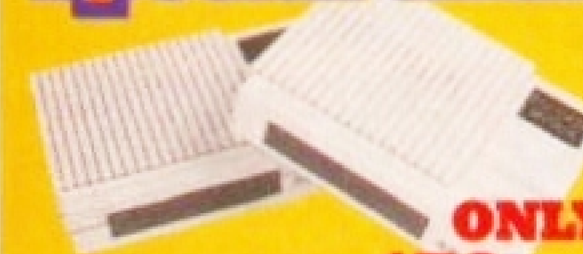
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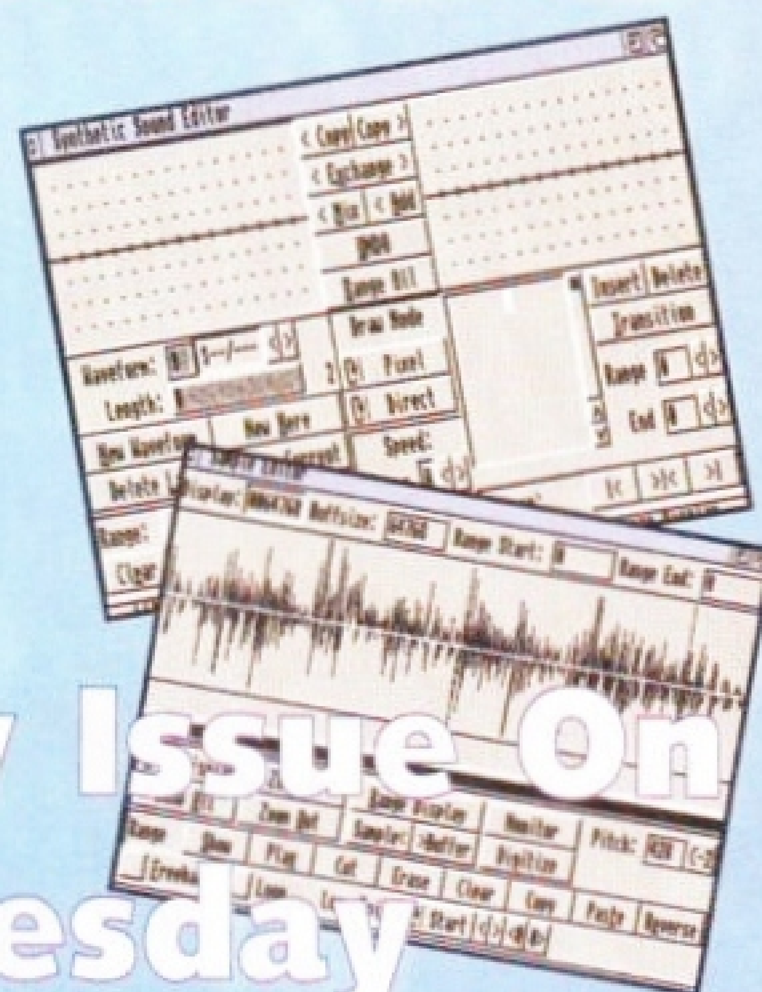
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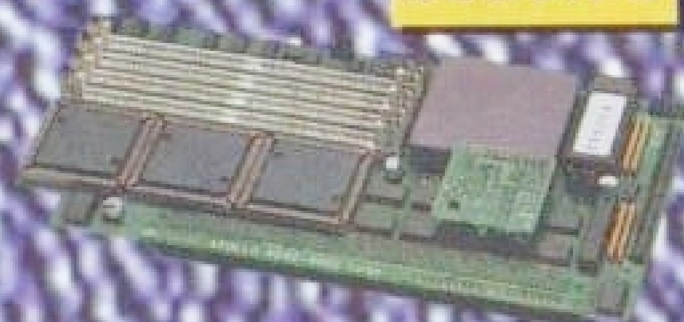


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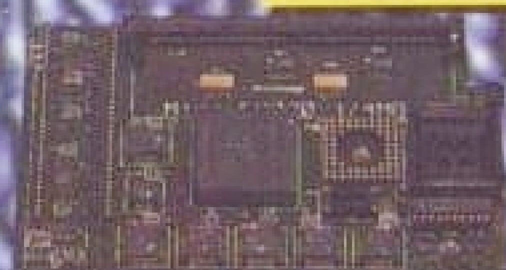
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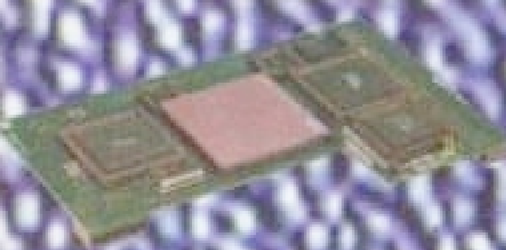
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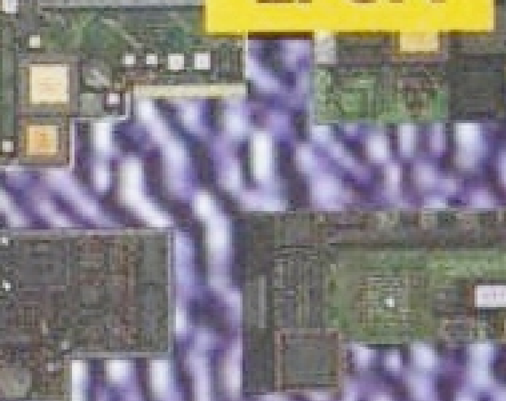
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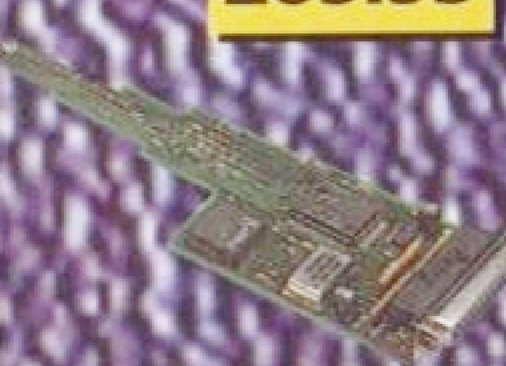
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SX-32

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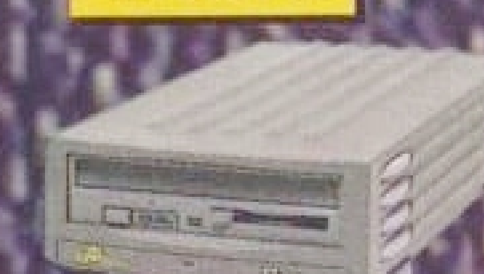
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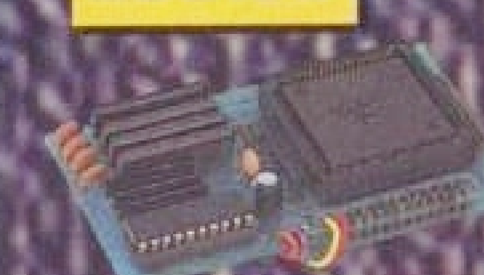
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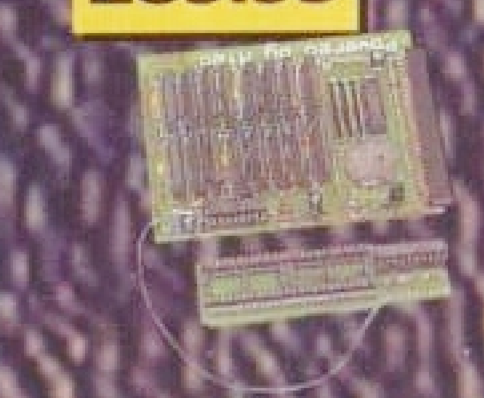
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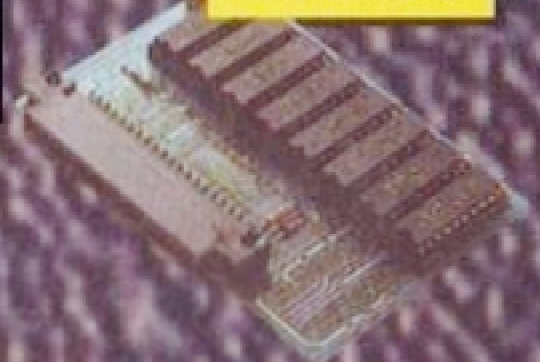
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MODEMS

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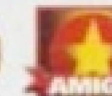
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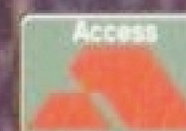
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